

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505T)
1200 Pennsylvania Ave., N.W.

Washington, D.C. 20460

45002-54

Date of Issuance:

11/21/22

NOTICE OF PESTICIDE:
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X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance:
Unconditional

EPA Reg. Number:

Name of Pesticide Product:

Albaugh THX-6

Name and Address of Registrant (include ZIP Code):

Nathan P. Ehresman Albaugh LLC 1525 NE 36th Street Ankeny, IA 50021

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

- 1. Submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
- 2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. You have 18 months from the date of registration to provide these data.

Continues page 2

Signature of Approving Official:	Date:
Venus Eagle, Product Manager 01 Invertebrate & Vertebrate Branch 3, Registration Division Office of Pesticide Programs	11/21/22

EPA Form 8570-6

Page 2 of 2 EPA Reg. No. 45002-54 Decision No. 578172

- 3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 45002-54."
- 4. If, after formal consultation with the appropriate Service(s), additional modifications are identified for any chemical in this product in the Service's Biological Opinion(s) for that chemical, EPA will notify Albaugh LLC in writing consistent with the terms in that Biological Opinion of any necessary required changes. Albaugh LLC must submit an application for amendment incorporating any required changes, including amended labels, consistent with the timeline specified in EPA's notification. If Albaugh LLC fails to comply with this term, Albaugh LLC has agreed in prior written acceptance on October 31, 2022, of these terms that EPA may cancel the registration under an expedited process under FIFRA 6(e).
- 5. Submit one copy of the final printed label for the record before you release the product for shipment.

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 FIFRA 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) lists 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.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

• Basic CSF dated 08/30/2021

If you have any questions, please contact Ralph Narain by phone at 202-566-2853, or via email at Narain.Ralph@epa.gov.

Enclosure: Stamped Label

THIAMETHOXAM	GROUP	4A	INSECTICIDE
MEFENOXAM	GROUP	4	FUNGICIDE
FLUDIOXONIL	GROUP	12	FUNGICIDE

# **Albaugh THX-6**

SEED TREATMENT

[Alternate Brand Names: LegumeStar Select ST]

A READY TO USE SEED TREATMENT FOR USE ON SOYBEAN, LENTILS AND CHICKPEAS FOR PROTECTION OF SEEDS AGAINST LISTED PESTS and SOILBORNE DISEASES

<b>ACTI</b> \	/E	<b>INGR</b>	EDIEN	ITS:
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Thiamethoxam:	14.30%
Mefenoxam:	2.15%
Fludioxonil:	0.72%
OTHER INGREDIENTS:	82.83%
TOTAL ·	100 00%

Contains:

1.29 lb. Thiamethoxam per gallon (154.6 grams per liter)

0.19 lb. Mefenoxam per gallon (22.8 grams per liter)

0.065 lb. Fludioxonil per gallon (7.8 grams per liter)

Albaugh THX-6 is a flowable concentrate formulation.

# **KEEP OUT OF REACH OF CHILDREN**

# **CAUTION**

#### **FIRST AID**

#### IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For transportation or medical emergencies call CHEMTREC toll free at 1-800-424-9300.

EPA Reg. No. 45002	_	EPA Est. No.
NET CONTENTS:	Gallons	Batch No.

# ACCEPTED

11/21/2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

45002-54

## **MANUFACTURED FOR:**

Albaugh, LLC 1525 NE36th Street Ankeny, IA 50021

# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if swallowed.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants,
- Shoes plus socks,
- Protective eyewear (face shield, goggles, or safety glasses)
- Chemical-resistant gloves made of any waterproof material: barrier laminate, butyl rubber ≥ 14 mils, natural rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC)

Multiple Task Workers (Multiple task workers perform multiple tasks in one day such as mixing, bagging/filling seed containers, product application, bag sewing, and clean up) must wear:

- The PPE required for applicators and handlers listed above
- Chemical-resistant coveralls (over long sleeved shirt and long pants)

# **ENGINEERING CONTROLS**

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d)], the handler PPE requirements may be reduced or modified as specified in the WPS.

# **USER SAFETY REQUIREMENTS**

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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with the product's concentrate. **DO NOT** reuse them.

# **USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands thoroughly after handling and before eating, drinking, chewing gum, using tobacco or using the toilet
- Remove clothing 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.

# PHYSICAL AND CHEMICAL HAZARDS

**DO NOT** place product near or allow product to come into contact with strong oxidizing substances (such as potassium permanganate) as a hazardous chemical reaction may occur.

## **ENVIRONMENTAL HAZARDS**

This product is highly toxic to birds, fish and aquatic invertebrates. For terrestrial use, 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 wash water or rinsate. Treated seed exposed on the soil surface may be hazardous to wildlife. Cover or collect seeds spilled during loading and planting.

**Pollinator Advisory**: Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops or weeds. 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:** Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. Thiamethoxam may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow. Mefenoxam is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of Mefenoxam where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Fludioxonil has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

**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 areas 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 is forecasted within 48 hours.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during clean-up procedures and disposal of wastes.

# DIRECTIONS FOR USE

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

Read all label directions carefully before use. This product is for use in commercial seed treatment facilities or as an end-use seed treatment on agricultural establishments at, or immediately before planting subject to the Restrictions listed below and as specified for each crop in the Crop Specific Use Instructions on this label.

Albaugh THX-6 may be applied by closed or open system seed treatment application processes. **DO NOT** apply more than 215 gallons of Albaugh THX-6 per 8-hour day for seed treatments utilizing a closed system. **DO NOT** apply more than 38 gallons of Albaugh THX-6 per 8-hour day for seed treatments utilizing an open system.

**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.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE, RESTRICTIONS, AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

# **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40CFR 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 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: Once the seeds are planted in soil, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area without restriction if there will be no worker contact with treated seed.

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 over long-sleeved shirt and long pants
- Protective eyewear
- Chemical-resistant gloves made of any waterproof material: barrier laminate, butyl rubber ≥ 14 mils, natural rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC),
- Shoes plus socks

#### **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 feed and foodstuffs.
- **DO NOT** allow children, pets, or livestock to have access to treated seed.
- **DO NOT** use at a rate that will result in more than 0.083 lb (37.8 grams) thiamethoxam per acre as a seed treatment application for soybean.
- **DO NOT** use at a rate that will result in more than 0.075 lb (34.0 grams) thiamethoxam per acre as a seed treatment application for chickpeas or lentils.
- The maximum application rate for thiamethoxam (including seed treatments, foliar applications, soil applications) is 0.266 lbs. AI per acre per calendar year. DO NOT apply more than 0.266 lbs. thiamethoxam ai per acre per calendar year.
- Regardless of the method of application, DO NOT apply more than 1.25 lb mefenoxam per acre per calendar year to soybean.
- With the exception of soybeans, DO NOT make any soil or foliar application of products containing thiamethoxam to
  crops grown from seed treated with thiamethoxam. For soybeans, DO NOT apply a neonicotinoid insecticide within
  45 days of planting seed treated with this product.
- 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.
- The maximum application rate for mefenoxam- and metalaxyl-containing products (including seed treatments, foliar applications, soil application) is 12.3 lb per acre per calendar year. DO NOT apply more than 12.3 lb of active ingredients, mefenoxam and metalaxyl, per acre per calendar year.
- DO NOT graze or feed livestock on areas planted from ALBAUGH THX-6 treated lentil and chickpea seed for 30 days after planting.
- DO NOT graze or feed livestock on areas planted from ALBAUGH THX-6 treated soybean seed.
- **DO NOT** apply more than 1.0 lbs of mefenoxam active ingredient per acre per calendar year to lentils and chickpeas.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- **DO NOT** apply more than 215 gallons of **Albaugh THX-6** per 8-hour day for seed treatments utilizing a closed system.
- DO NOT apply more than 38 gallons of Albaugh THX-6 per 8-hour day for seed treatments using an open system.
- Exposed treated seed may be hazardous to wildlife. 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.
- Dispose of seed packaging in accordance with local requirements.

# Rotational Crop Intervals:

- Alfalfa, Brassica (cole) leafy vegetables, buckwheat, corn, pearl millet, proso millet, popcorn, rice (dry-seeded), sorghum, teosinte, wild rice, cotton, cucurbit vegetables, dry bulb onions, fruiting vegetables, leafy vegetables, legume vegetables, mint (peppermint and spearmint), oil seed crops (black mustard seed, borage seed, crambe seed, field mustard seed, flax seed, Indian mustard seed, Indian rapeseed seed, peanuts, rapeseed seed, and safflower seed), root vegetables, strawberry, sunflowers, tobacco, and tuberous and corm vegetables may be planted immediately after the Albaugh THX-6 treated seed was planted.
- For any other crop, the minimum plant back interval is 120 days from the date the Albaugh THX-6 treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.
- **DO NOT** contaminate water bodies when disposing of planting equipment wash water.
- 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.

# **RESISTANCE MANAGEMENT**

THIAMETHOXAM GROUP 4A INSECTICIDE

For insecticide resistance management, this product contains a Group 4A insecticide. Any insect population may contain individuals naturally resistant to this product and other Group 4A insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed. Thiamethoxam is a systemic insecticide belonging to the neonicotinoid class of chemistry which includes nicotinic acetylcholine receptor (nAChR) agonists.

To delay insecticide resistance, take the following steps:

- Rotate the use of this product or other Group 4A insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross- resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.

## For additional information on Insecticide Resistance Management:

- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at: http://www.irac-online.org

MEFENOXAM	GROUP	4	FUNGICIDE
FLUDIOXONIL	GROUP	12	FUNGICIDE

For fungicide resistance management, this product contains mefenoxam, a Group 4 fungicide; and fludioxonil, a Group 12 fungicide. Mefenoxam belongs to the phenylamide class of chemistry. Fludioxonil belongs to the phenylpyrrole class of chemistry.

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.

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, LLC 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 for any additional recommendations for the specific site and pest problems in your area.

- Contact an Albaugh, LLC representative at 1-800-247-8013.
- Visit the Fungicide Resistance Action Committee (FRAC) at http://www.frac.info

#### SEED TREATMENT

This product is a combination of thiamethoxam insecticide and a mixture of the fungicides mefenoxam and fludioxonil as a ready to use seed treatment. When used on listed crops, the fungicide mixture in this product provides 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 listed crops.

# **TARGET INSECTS (THIAMETHOXAM)**

Early season protection against injury by aphids, bean leaf beetle, grape colaspis, leaf miners, leaf hoppers, Mexican bean beetle, seed corn maggot, three-cornered alfalfa hopper, thrips, white grubs, and wireworm.

This product also protects against pea leaf weevil.

## **TARGET DISEASES (MEFENOXAM & FLUDIOXONIL)**

Protection against damping-off, seed, and seedling diseases due to *Pythium*, *Phytophthora*, *Fusarium*, and *Rhizoctonia* species. This product also suppresses seed-borne *Phomopsis* species.

Apply as a seed treatment using standard slurry or mist-type equipment. Apply a uniform application to seed to ensure seed safety and best disease and insect protection. Seed must be sound and well cured prior to treatment. Product must be diluted with sufficient water to ensure complete seed coverage.

**Tank Mixing:** 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.

**Compatibility:** Before mixing this product with other seed treatment products conduct a compatibility test before use:

- Use a clear glass container, thoroughly mix all intended seed treatment products with appropriate amount of water;
- Allow the mixture to sit for one hour;
- · Remix and observe for incompatibility

#### MIXING PROCEDURES

Do not mix this product with other pesticides unless sufficient compatibility, loading rates, and crop safety factors are determined.

This product has been found to be compatible with some liquid inoculant products. This product may be mixed or applied sequentially with approved liquid inoculants. Consult the manufacturer of the liquid inoculants and an ALBAUGH seed treatment representative for directions before applying this product with liquid inoculants.

This product contains an EPA-approved colorant that imparts a color to the seed as required by the Federal Seed Act.

Allow seed to dry before bagging.

#### **SOYBEANS:**

This product provides protection against damping-off and seed rots due to *Pythium, Phytophthora, Fusarium*, and *Rhizoctonia* spp., and early season *Phytophthora* root rot. This product also suppresses seed-borne *Phomopsis* spp. This product also provides early season protection against injury by aphids, bean leaf beetle, grape colaspis, leaf miners, leaf hoppers, Mexican bean beetle, seed corn maggot, three-cornered alfalfa hopper, thrips, white grubs, and wireworm. This product protects against pea leaf weevil.

RATE OF THIS PRODUCT Use Rate based on 3,000 seeds / lb (150,000 seeds / 50 lb bushel)						
	Fl. Oz. /		mI / 1,000 Grams AI / 100 kg of seed mg Al		mg Al / Seed	
100 lbs seed	1,000 seeds	140,000 seeds	seeds	Grains Ai / 100 kg of seed Ing Ai / 1		ilig Ai / Seed
				thiamethoxam	50.4	0.0762
5.0	0.017	2.33	0.49	mefenoxam	7.4	0.0112
				fludioxonil	2.5	0.0038

**WHEN TO ADD ADDITIONAL** metalaxyl or mefenoxam product: If target fields have a history of high *Phytophthora* pressure, add additional metalaxyl or mefenoxam product. The additional metalaxyl or mefenoxam product may reduce compatibility with some rhizobia inoculants. Consult with the maker of rhizobia inoculants before adding the additional metalaxyl or mefenoxam product.

**IMPORTANT:** To maintain mg ai / seed, adjust fluid ounces / 100 lb of seed in proportion to the actual seed count / lb compared to the standard number of seeds / lb for that crop; fluid ounces per number of seeds (i.e., 1000, 80,000, 140,000) does not need to be adjusted. For example, if there are actually 2800 soybean seeds / lb use:  $2800 \div 3000 \times 5.0 = 4.67$  fl. oz / 100 lb of seed.

#### **RESTRICTIONS:**

- DO NOT apply more than 215 gallons of Albaugh THX-6 per 8-hour day for seed treatments utilizing a closed system.
- **DO NOT** apply more than 38 gallons of Albaugh THX-6 per 8-hour day for seed treatments utilizing an open system.
- Maximum one application per calendar year.
- This product must not be tank mixed with any pesticide unless physical compatibility and phytotoxicity tests have been completed and proved to be satisfactory.
- DO NOT apply a neonicotinoid insecticide within 45 days of planting soybean seed treated with Albaugh THX-6.
- **DO NOT** use at a rate that will result in more than 0.083 lb (37.8 grams) thiamethoxam per acre as a seed treatment application for soybeans.
- Regardless of type of application, **DO NOT** apply more than 0.266 lb (120.7 grams) thiamethoxam per acre per calendar year.
- **DO NOT** exceed 0.03 lbs of ai per 100 lbs of seed for all mefenoxam seed treatment uses.
- Regardless of the method of application, **DO NOT** apply more than 1.25 lb (567.0 grams) mefenoxam- and metalaxyl-containing products per acre per calendar year on soybeans.
- DO NOT graze or feed livestock on areas planted from ALBAUGH THX-6 treated soybean seed.

# CHICKPEAS (Garbanzo bean) and LENTILS:

This product provides protection against damping-off and seed rots due to *Pythium, Phytophthora, Fusarium,* and *Rhizoctonia* spp., phomopsis seed decay, and early season Phytophthora root rot. This product also provides early season protection against injury by aphids, bean leaf beetle, leaf miners, leaf hoppers, Mexican bean beetle, seed corn maggot, three-cornered alfalfa hopper, thrips, white grubs, and wireworm.

# **RATE OF THIS PROUCT**

Use Rate based on

1,000 (kabuli-type\*) or 2,300 (desi-type\*\*) chickpea seeds / lb

6,500 (large-seeded type\*\*\*) or 12,600 – 19,700 (small -seeded type\*\*\*) lentil seeds / lb.

Fl. Oz. / 100 lb. of seed	Grams AI / 100	kg of seed	mg Al / Seed
	thiamethoxam	50.4	*0.229 **0.099 ***0.035 ****0.018 – 0.012
5.0	mefenoxam	7.4	*0.034 **0.015 ***0.005 ****0.0027 – 0.0017
	fludioxonil	2.5	*0.012 **0.005 ***0.002 ****0.0009 – 0.0006

WHEN TO ADD ADDITIONAL metalaxyl or mefenoxam product: If target fields have a history of high *Phytophthora* pressure, add additional metalaxyl or mefenoxam product. The additional metalaxyl or mefenoxam product may reduce compatibility with some rhizobia inoculants. Consult with the maker of rhizobia inoculants before adding the additional metalaxyl or mefenoxam product.

**WHEN TO USE ADDITIONAL FLUDIOXONIL:** Use 1.25 grams additional fludioxonil AI / 100 kg of seed, if planting location has a history of high *Fusarium* or *Rhizoctonia* pressure.

#### **RESTRICTIONS:**

- **DO NOT** apply more than 215 gallons of Albaugh THX-6 per 8-hour day for seed treatments utilizing a closed system.
- **DO NOT** apply more than 38 gallons of Albaugh THX-6 per 8-hour day for seed treatments utilizing an open system.
- DO NOT apply a neonicotinoid insecticide within 45 days of planting seed treated with Albaugh THX-6.
- Maximum one application per calendar year.
- This product must not be tank mixed with any pesticide unless physical compatibility and phytotoxicity tests have been completed and proved to be satisfactory.
- Regardless of the method of application, DO NOT apply more than 1.0 lb (453.6 grams) mefenoxam or metalaxyl per acre per calendar year for chickpea or lentils.
- **DO NOT** use at a rate that will result in more than 0.075 lb (34.0 grams) thiamethoxam per acre as a seed treatment application for chickpeas or lentils.
- Regardless of the type of application, **DO NOT** apply more than 0.266 lb (120.7 grams) thiamethoxam per acre per calendar year.
- **DO NOT** graze or feed livestock on areas planted from ALBAUGH THX-6 treated lentil and chickpea seed for 30 days after planting.

**CA RESTRICTION:** Seed and pod vegetable seed treated in California must be destined for planting in states other than California and is not to be planted in California.

# 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 Albaugh THX-6 (EPA Reg. No. 45002-LU) which contains thiamethoxam, mefenoxam, and 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 ALBAUGH THX-6 (EPA Reg. No. 45002-LU):

- Pollinator Advisory: Thiamethoxam is highly toxic to bees and effects may be possible as a result of exposure to
  translocated residues in blooming crops. 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:** Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. Thiamethoxam may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow. Mefenoxam is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of Mefenoxam where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Fludioxonil has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.
- **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 areas 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 is forecasted within 48 hours.
- Store treated seeds away from feed and foodstuffs.
- Wear long-sleeved shirt, long pants, chemical-resistant gloves, shoes plus socks, and protective eyewear when handling treated seed.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Treated seed exposed on the soil surface may be hazardous to wildlife. Cover or collect treated seeds that are spilled during handling, loading, and planting.
- Excess or leftover seed may be double-sown around the headland or buried away from bodies of water in accordance with local requirements.
- DO NOT contaminate water bodies when disposing of planting equipment wash water.
- Dispose of seed packaging in accordance with local requirements.
- For terrestrial use, 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 bodies of water when disposing of planting equipment wash water
- **DO NOT** allow children, pets, or livestock to have access to treated seed.
- **DO NOT** graze or feed livestock on areas planted from ALBAUGH THX-6 treated lentil and chickpea seed for 30 days after planting.
- DO NOT graze or feed livestock on areas planted from ALBAUGH THX-6 treated soybean seed.
- This seed has been treated with a fungicide containing fludioxonil.
- **DO NOT** use for feed, food, or oil purposes.
- Rotational Crop Intervals:
  - In the event of a crop failure or harvest of a crop grown from Albaugh THX-6 treated seed, the field may be replanted immediately to Alfalfa, Brassica (cole) leafy vegetables, buckwheat, corn, pearl millet, proso millet, popcorn, rice (dry-seeded), sorghum, teosinte, wild rice, cotton, cucurbit vegetables, dry bulb onions, fruiting vegetables, leafy vegetables, legume vegetables, mint (peppermint and spearmint), oil seed crops (black mustard seed, borage seed, crambe seed, field mustard seed, flax seed, Indian mustard seed, Indian rapeseed seed, peanuts, rapeseed seed, and safflower seed), root vegetables, strawberry, sunflowers, tobacco, and tuberous and corm vegetables may be planted immediately after the Albaugh THX-6 treated seed was planted.

- For any other crop, the minimum plant back interval is 120 days from the date seed treated with this product was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.
- DO NOT apply a neonicotinoid insecticide within 45 days of planting soybean seed treated with Albaugh THX-6
- This seed has been treated with \_X\_ lbs thiamethoxam per \_\_\_\_ lbs of seed [ or \_X\_ mg thiamethoxam per seed]. This seed has been treated with \_X\_ lbs mefenoxam per \_\_\_\_ lbs of seed [ or \_X\_ mg mefenoxam per seed]. This seed has been treated with \_X\_ lbs fludioxonil per \_\_\_\_ lbs of seed [ or \_X\_ mg fludioxonil per seed].
- For soybeans, **DO NOT** exceed 0.03 lbs of ai per 100 lbs of seed for all mefenoxam seed treatment uses.
- **DO NOT** apply more than 0.052 lb ai/A/calendar year of mefenoxam containing products as a seed treatment use on Soybeans.
- DO NOT apply more than 1.0 lbs of mefenoxam active ingredient per acre per calendar year to lentils and chickpeas.
- The maximum yearly total application rate for mefenoxam/metalaxyl 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 mefenoxam/metalaxyl per acre per calendar year.
- **DO NOT** use at a rate that will result in more than 0.083 lb. thiamethoxam per acre (37.8 grams ai/A) as a seed treatment application on soybeans.
- **DO NOT** use at a rate that will result in more than 0.075 lb. (34.0 grams) thiamethoxam per acre as a seed treatment application for chickpeas or lentils.
- The maximum application rate for thiamethoxam (including seed treatments, foliar applications, soil applications) is 0.266 lbs. Al per acre per calendar year. DO NOT apply more than 0.266 lbs. thiamethoxam ai per acre per calendar year.
- With the exception of soybeans, **DO NOT** make any soil or foliar application of products containing thiamethoxam to crops grown from seed.
- CA RESTRICTION: Seed and pod vegetable seed treated in California must be destined for planting in states other than California and is not to be planted in California.
- 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 store leftover treated seed where there is a chance of it becoming mixed with untreated seed.
- Store treated seed in cool, dry conditions.
- 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 with an EPA approved dye such as one of the dyes listed in 40 CFR Sections 180.910 &
  180.920 to distinguish and prevent subsequent inadvertent use as a food for man or feed animals.

# STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry location. **DO NOT** store in direct sunlight. **DO NOT** store above 90° F for a prolonged periods of time. Protect from freezing temperatures. After prolonged storage in intense cold, allow product to return to approximately 75° F before use.

**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:**

[Nonrefillable Containers 5 Gallons or Less]

Nonrefillable HDPE 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.

# [Nonrefillable containers larger than 5 gallons]

Nonrefillable HDPE 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. 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 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 larger than 5 gallons]

Refillable HDPE 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.

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The **DIRECTIONS FOR USE** of this product are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 or the Seller. All such risks shall be assumed by the Buyer. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.** 

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# **LABEL HISTORY**

(Not part of final printed label)

File Name	Version Mark	Comment
045002-000##.20210826.DRAFT (THX-6)	082621	Section 3 Draft Label
045002-000LU.20220804.DRAFT (THX-6)	080422	Revisions requested by US EPA
045002-000.LU.20220914.DRAFT (THX-6)	091422	Revisions requested by US EPA
045002-000LU.20221031.DRAFT (THX-6)	103122	Revisions requested by US EPA
045002-000LU.20221102.DRAFT (THX-6)	110222	Revisions requested by US EPA
045002-000LU.20221121.DRAFT (THX-6)	112122	Revisions requested by US EPA