

## OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

September 13, 2024

Nikki Benson Regulatory Specialist Nufarm Americas Inc. 11901 S. Austin Ave. Alsip, IL 60803

Subject: Label Amendment - Registration Review Mitigation for Thifensulfuron-methyl

Product Name: Thifen E-AG 75 WDG Herbicide

EPA Registration Number: 228-666 Application Date: December 11, 2017

Decision Number: 596246

#### Dear Nikki Benson:

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 Thifensulfuron-methyl Interim Decision, 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 Assurance.

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A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Caleb Carr by phone at (202) 566-0636, or via email at <a href="mailto:carr.caleb@epa.gov">carr.caleb@epa.gov</a>.

Sincerely,

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

**ENCLOSURE:** Stamped label

# ACCEPTED

Sep 13, 2024

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 228-666

## THIFENSULFURON METHYL | GROUP 2 HERBICIDE

# Thifen E-AG 75 WDG Herbicide

**Dry Flowable** 

Apply as a Pre-Plant, Postemergent or Post-Harvest Herbicide to control weeds in Wheat, Barley, Oat, Triticale, Soybeans, Corn, and Fallow.

**ACTIVE INGREDIENT:** By Weight Thifensulfuron-methyl: Methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl) amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate 75.0% OTHER INGREDIENTS: 25.0% TOTAL: 100.0%

## KEEP OUT OF REACH OF CHILDREN CAUTION

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

FIRST AID		
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>	
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
	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 1-800-424-9300 for emergency medical treatment information.

## PRECAUTIONARY STATEMENTS HAZARDS TO **HUMANS AND DOMESTIC ANIMALS**

Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wear long-sleeved shirt and long pants, socks and shoes and waterproof gloves.

### PERSONAL PROTECTIVE EQUIPMENT

## Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- 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.

EPA Reg. No. 228-666

EPA Est. No.

Manufactured for: Etigra™ 501 Cascade Pointe Lane, Suite 103 Carv. NC 27513 www.etigra.com

Thifen E-AG 75 WDG Herbicide contains thifensulfuron-methyl, the active ingredient used in Harmony® GT XP.

Net Weight:

#### **USER SAFETY RECOMMENDATIONS**

Users should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

#### **ENVIRONMENTAL HAZARDS**

**Groundwater Advisory:** This chemical 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 impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for days after application. 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 loading of thifensulfuron-methyl from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

**Non-target Organism Advisory:** This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

## **DIRECTIONS FOR USE**

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours. 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
- Waterproof gloves
- ·Shoes plus socks

**WINDBLOWN SOIL PARTICLES:** Thifen E-AG 75 WDG Herbicide has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affects the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying Thifen E-AG 75 WDG Herbicide if prevailing local conditions may be expected to result in off-site movement.

## MANDATORY SPRAY DRIFT MANAGEMENT

## **Aerial Applications:**

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S641).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S641).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

## **Ground Boom Applications:**

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASAE S572.3).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASAE S572.3).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

#### **Boom-less Ground Applications:**

- Applicators are required to use a Medium or coarser droplet size (ASAE S572.3) for all applications.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

#### SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

## **Controlling Droplet Size – Ground Boom**

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

#### **Controlling Droplet Size – Aircraft**

• Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

**BOOM HEIGHT – Ground Boom** Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with

the crop and have minimal bounce.

#### **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 feet above the crop canopy, unless a greater application height is necessary for pilot safety.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

#### **WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### **Boom-less Ground Applications:**

• Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

#### Handheld Technology Applications:

• Take precautions to minimize spray drift.

### WEED RESISTANCE MANAGEMENT

For resistance management, Thifen E-AG 75 WDG Herbicide contains the Group 2 herbicides – thifensulfuron methyl. Any weed population may contain or develop plants naturally resistant to Thifen E-AG 75 WDG and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

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

• Rotate the use of Thifen E-AG 75 WDG or other Group 2 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 before and 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. Users should report lack of performance to registrant or their representative.
- 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 Nufarm contact at 855-280-6609. It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. Do not assume that each listed weed is being controlled by this mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredient in this product.

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

## **GENERAL INFORMATION**

Thifen E-AG 75 WDG Herbicide is a dry flowable granule that is mixed in a carrier and broadcast sprayed for selective postemergence control of certain broadleaf weeds in the following crops and sites:

Crop
Barley
Corn
Oats
Rice
Sorghum
(grain)
Soybeans
Triticale
Wheat (including durum)

Pre-plant burndown
Post-harvest burndown
Fallow
Fallow

NOTE: Before using Thifen E-AG 75 WDG Herbicide, be certain that is registered for use in you, state by checking with your state extension service or Department of Agriculture.

Thifen E-AG 75 WDG Herbicide rapidly stops the growth of susceptible weeds. However, typical symptoms of dying weeds (discoloration) may not be noticeable for 1-3 weeks after application (2-5 weeks for wild garlic) depending on the environmental conditions and weed susceptibility. Warm, moist conditions following treatment promote the activity of Thifen E-AG 75 WDG Herbicide, while cold, dry conditions delay the activity. Weeds hardened-off by cold weather or drought stress will be less susceptible.

Weed spectrum and size of weed at time of application determines the use rate. Duration of effect and degree of control are dependent upon the rate applied, the sensitivity and size of the target weeds, and environmental conditions at the time of and following application.

For best results, apply Thifen E-AG 75 WDG Herbicide to young, actively growing weeds. Because a vigorous growing crop aids weed control by shading and providing competition, in areas of thin crop stand or seeding skips weeds may not be adequately controlled. Conversely, a dense crop canopy at time of application may result in reduced weed control by intercepting spray.

#### **GENERAL USE PRECAUTIONS**

Do NOT apply this product through any type of irrigation system.

Do NOT graze or feed forage or hay from treated areas to livestock (harvested straw may be used for bedding and / or feed).

Do NOT use with spray additives that alter the pH of the spray solution below pH 5.0 or above pH 9.0, as rapid product degradation can occur. Spray solutions of pH 6.0-8.0 allow for optimum stability of Thifen E-AG 75 WDG Herbicide.

Do NOT apply to wheat, barley, oat or triticale crops underseeded with another crop.

Unsatisfactory control may result if applications are made to weeds under stress, that are in the cotyledon stage, or that are larger than the sizes indicated.

Applying Thifen E-AG 75 WDG Herbicide to crops that are stressed or known to be sensitive to this product may result in injury.

Different varieties of a crop may have differing levels of sensitivity to Thifen E-AG 75 WDG Herbicide under otherwise normal conditions.

For Thifen E-AG 75 WDG Herbicide to be sufficiently absorbed by weed foliage, several hours of dry weather are required. If rainfall or snowfall occurs soon after application, weed control may be adversely affected.

Thifen E-AG 75 WDG Herbicide should be used only in accordance with recommendations on this label or in separately published Etigra recommendations.

Etigra will not be responsible for losses or damages resulting from the use of this product in any manner not specifically recommended by Etigra.

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

Do NOT apply, drain or flush equipment on or near desirable trees or other plants or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.

Do NOT use on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of spray to desirable plants.

Injury to or loss of adjacent sensitive crops and vegetation may result from failure to observe the following:

Take all necessary precautions to avoid all direct or indirect contact (such as spray drift) with non-target plants or areas.

Carefully observe all sprayer cleanup instructions both prior to and after using this product, as sprayer tank residue may damage crops other than wheat, barley, oat, triticale, corn, or soybeans.

Wheat, barley, oat, triticale, corn and soybean varieties may differ in their response to various herbicides. Etigra recommends that you first consult your state experiment station, university, or extension agent as to sensitivity to any herbicide. If no information is available, limit the initial use of

Thifen E-AG 75 WDG Herbicide to a small area.

For wheat, barley, oat, and triticale, under certain conditions such as heavy rainfall, prolonged cold weather (daily high temperature less than 50 Deg. F.), or wide fluctuations in day/night temperatures prior to or soon after Thifen E-AG 75 WDG Herbicide application, temporary discoloration and/or crop injury may occur. To reduce the potential of crop injury, tank mix Thifen E-AG 75 WDG Herbicide with 2,4-D (ester formulations perform best-see the TANK MIXTURES section of this label) and apply after the crop is in the tillering stage of growth.

Thifen E-AG 75 WDG Herbicide should not be applied to corn, oat, wheat, barley, triticale, or soybeans that are stressed by severe weather conditions, drought (including low levels of subsoil moisture), low fertility, water-saturated soil, disease, or insect damage, as crop injury may result. Risk of injury is greatest when the cereal crop is in the 2 to 5-leaf stage. Severe winter stress, drought, disease, or insect damage following application also may result in crop injury.

Control of weeds in wheel track areas may be reduced for ground applications applied to weeds when dry, dusty field conditions exist.

#### **SPRAY ADJUVANTS**

Always include a spray adjuvant with applications of Thifen E-AG 75 WDG Herbicide. In addition to a spray adjuvant, an ammonium nitrogen fertilizer may be used. Do not use low rates of liquid nitrogen fertilizer solution as a substitute for surfactant. Antifoaming agents may be used if needed.

Consult your Ag dealer or applicator, local Etigra fact sheets and technical bulletins prior to using an adjuvant system. If another herbicide is tank mixed with Thifen E-AG 75 WDG Herbicide, select adjuvants authorized for use with both products. Products must contain only EPA-exempt ingredients (40 CFR 1001).

Adjuvant	Concentration	Instructions
Nonionic	0.05 - 0.50% v/v (1/2 - 4 pints/ 100 gallons)	For all cases except burndown as specified below
Surfactant <sup>1</sup>	0.25 - 0.50% v/v (1 - 2 quarts / 100 gallons)	For burndown applications. To enhance control in hot and dry conditions, use the higher rate listed.
Crop Oil Concentrate	1% v/v (1 gallon per 100 gallons)	Modified seed oil adjuvants may be used at a rate of 0.5% v/v if specified in local Etigra product literature or service bulletins.
(Petroleum or Modified Seed Oil)	2% v/v (2 gallons / 100 gallons)	Use this rate in arid conditions.
Combination Adjuvant Products	Use rates that provide the required amount of NIS, COC, MSO and / or Ammonium Nitrogen Fertilizer	Consult product literature for use rates and restrictions.
Ammonium Nitrogen Fertilizer	2 quarts / acre	Use a high-quality ammonium nitrate (UAN), such as 28% N. Double the rate (to 4 quarts / acre) for arid conditions.
	2 pounds / acre	Use spray-grade ammonium sulfate (AMS). Double the rate (to 4 pounds / acre) for arid conditions.
Other Adjuvants	Consult product literature	Other adjuvant types may be used if they provide the same functionality and have been evaluated and approved by Etigra product management. Consult separate Etigra technical bulletins for detailed information before using adjuvant types not specified on this label.

<sup>&</sup>lt;sup>1</sup> Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12. For additional information, refer to the TANK MIXTURES section of this label.

#### **CROP ROTATION**

Wheat, barley, oat, triticale, soybeans and field corn may be replanted anytime after the application of Thifen E-AG 75 WDG Herbicide.

Any other crop may be planted 45 days after the application of Thifen E-AG 75 WDG Herbicide.

## **MIXING INSTRUCTIONS**

- 1. Fill the tank 1/4 to 1/3 full of water
- 2. While agitating, add the required amount of Thifen E-AG 75 WDG Herbicide.

- 3. Continue agitation until the Thifen E-AG 75 WDG Herbicide is fully dispersed, at least 5 minutes.
- 4. Once the Thifen E-AG 75 WDG Herbicide is fully dispersed, maintain agitation and continue filling tank with water. Thifen E-AG 75 WDG Herbicide should be thoroughly mixed with water before adding any other material.
- 5. As the tank is filling, add tank mix partners (if desired) then add the required volume of spray adjuvant. Always add spray adjuvant last. Antifoaming agents may be used. Do not use with spray additives that alter the pH of the spray solution below pH 6.0 as rapid product degradation can occur. Spray solutions of pH 7.0 and higher allow for optimum stability of Thifen E-AG 75 WDG Herbicide.
- 6. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly reagitate before using.
- 7. Apply Thifen E-AG 75 WDG Herbicide spray mixture within 24 hours of mixing to avoid product degradation.
- 8. If Thifen E-AG 75 WDG Herbicide and a tank mix partner are to be applied in multiple loads, preslurry the Thifen E-AG 75 WDG Herbicide in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the Thifen E-AG 75 WDG Herbicide.

#### **APPLICATION INSTRUCTIONS**

Do not apply during a temperature inversion, when winds are gusty, or when conditions favor poor coverage and/or off-target spray movement.

In wheat, barley, oats, triticale, post-harvest burndown, pre-plant burndown and fallow apply 2 - 5 gallons per acre; In Idaho, Oregon and Utah use at least 3 gallons per acre.

In corn and soybeans, use a minimum of 5 gallons per acre.

When applying Thifen E-AG 75 WDG Herbicide by air in areas adjacent to sensitive crops, use solid stream nozzles oriented straight back. Adjust the swath to avoid spray drift damage to sensitive crops downwind and/or use ground equipment to treat the border edge of fields. See the Spray Drift Management section of this label.

# WHEAT, BARLEY, OAT, TRITICALE, POST-HARVEST BURNDOWN, PRE-PLANT BURNDOWN AND FALLOW:

For flat-fan nozzles, use a spray volume of at least 5 gal per acre (GPA).

For flood nozzles on 30" spacings, use at least 10 GPA, flood nozzles no larger than TK10 (or the equivalent), and a pressure of at least 30 psi. For 40" nozzle spacings, use at least 13 GPA; for 60" spacings use at least 20 GPA. It is essential to overlap the nozzles 100% for all spacings.

Raindrop RA® nozzles are not recommended for Thifen E-AG 75 WDG Herbicide applications, as weed control performance may be reduced.

Use screens that are 50-mesh or larger.

#### **CORN AND SOYBEANS**

## **Broadcast Application**

Use 10-25 gallons of water per acre.

Ensure that equipment is set up to avoid applying an excessive rate directly over the rows and into the corn plant whorl.

Overlaps or starting, stopping, slowing, and turning while spraying may result in crop injury.

Under heavy weed pressure or dense crop foliage, increase minimum spray volume to 15-25 gal per acre.

#### **Band Application**

For band applications, use proportionately less spray mixture.

To avoid crop injury, carefully calibrate the band applicator to not exceed the labeled rate.

Carefully follow the manufacturer's instructions for nozzle type (flat fans), orientation, distance of nozzles from the crop and weeds, spray volumes, calibration and spray pressure.

#### **SPRAY EQUIPMENT**

For specific application equipment, refer to the manufacturer's recommendations for additional information on GPA, pressure, speed, nozzle types and arrangements, nozzle heights above the target canopy, etc.

Be sure to calibrate air or ground equipment properly before application. Select a spray volume and delivery system that will ensure thorough coverage and uniform spray pattern with minimum drift. Use higher spray volumes to obtain better coverage when crop canopy is dense. Avoid swath overlapping, and shut off spray booms while starting, turning, slowing, or stopping, to avoid injury to the crop. Do not make applications using equipment and/or spray volumes or during weather conditions that might cause spray to drift onto non-target sites. For additional information on spray drift refer to the SPRAY DRIFT MANAGEMENT section of this label. Continuous agitation is required to keep Thifen E-AG 75 WDG Herbicide in suspension.

#### SPRAYER CLEANUP

The spray equipment must be cleaned before Thifen E-AG 75 WDG Herbicide is sprayed. Follow the cleanup procedures specified on the labels of the previously applied products. If no directions are provided, follow the six steps outlined in the AFTER SPRAYING Thifen E-AG 75 WDG Herbicide section of this label.

#### AT THE END OF THE DAY

It is recommended that during periods when multiple loads of Thifen E-AG 75 WDG Herbicide are applied, at the end of each day of spraying the interior of the tank being rinsed with fresh water and then partially filled, and the boom and hoses flushed. This will prevent the buildup of dried pesticide deposits which can accumulate in the application equipment.

# AFTER SPRAYING THIFEN E-AG 75 WDG HERBICIDE AND BEFORE SPRAYING CROPS OTHER THAN WHEAT, BARLEY, OAT, TRITICALE, FIELD CORN AND SOYBEANS

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of Thifen E-AG 75 WDG Herbicide as follows:

- 1. Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water. Loosen and physically remove any visible deposits.
- 2. Fill the tank with clean water and 1 gal of household ammonia<sup>†</sup> (contains 3% active ingredient) for every 100 gal of water. Flush the hoses, boom, and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 min. Flush the hoses, boom, and nozzles again with the cleaning solution and then drain the tank.
- 3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
- 4. Repeat step 2.
- 5. Rinse the tank, boom, and hoses with clean water.
- 6. If only Ammonia is used as a cleaner, the rinsate solution may be applied back to the crop(s) recommended on this label. Do not exceed the maximum labeled use rate. If other cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.
- <sup>†</sup> Equivalent amounts of an alternate-strength ammonia solution or an Etigra-approved cleaner can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions. Consult your Ag dealer, applicator, or Etigra representative for a listing of approved cleaners.

## Notes:

- 1. **CAUTION:** Do not use chlorine bleach with ammonia because dangerous gases will form. Do not clean equipment in an enclosed area.
- 2. Steam-cleaning aerial spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.
- 3. When Thifen E-AG 75 WDG Herbicide is tank mixed with other pesticides, all cleanout procedures for each product should be examined and the most rigorous procedure should be followed.
- 4. In addition to this cleanout procedure, all pre-cleanout guidelines on subsequently applied products

- should be followed as per the individual product labels.
- 5. When routine spraying practices include shared equipment frequently being switched between applications of Thifen E-AG 75 WDG Herbicide and applications of other pesticides to Thifen E-AG 75 WDG Herbicide -sensitive crops during the same spray season, it is recommended that a sprayer be dedicated to Thifen E-AG 75 WDG Herbicide to further reduce the chance of crop injury.

#### INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, populations monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

#### **FALLOW**

Thifen E-AG 75 WDG Herbicide may be used as a fallow treatment for burndown of emerged weeds listed in the CEREALS section of this label, in combination with other suitable registered fallow herbicides (refer to the TANK MIXTURES section of this label for additional information). Apply Thifen E-AG 75 WDG Herbicide in the spring, summer or fall when the majority of weeds have emerged and are actively growing. For additional information, refer to the CROP ROTATION section.

#### **APPLICATION INSTRUCTIONS**

Apply 0.3 - 0.6 ounces of Thifen E-AG 75 WDG Herbicide per acre. Sequential treatments may be made provided total amount of Thifen E-AG 75 WDG Herbicide applied does not exceed 1.0 ounce per acre.

#### TANK MIXTURES

Thifen E-AG 75 WDG Herbicide applied as a fallow treatment should be tank mixed with another herbicide that is registered for use in fallow, including glyphosate (such as Roundup®), Landmaster® II, Fallow Master®, RT Master®, glyphosate plus 2,4-D (ester formulations work best), gylphosate plus dicamba (such as Banvel®/Clarity®), 2,4-D (ester formulations work best), or dicamba (such as Banvel®/Clarity®) alone.

## PREPLANT BURNDOWN

For burndown of emerged weeds prior to wheat (including durum), barley, oat, triticale, rice, grain sorghum, soybeans and field corn plants emergence, apply Thifen E-AG 75 WDG Herbicide as a broadcast application. As a burndown treatment prior to planting any other crop (such as sugarbeets, canola, rice, or grain sorghum), apply Thifen E-AG 75 WDG Herbicide at least 45 days prior to planting. For additional information, refer to the CROP ROTATION section.

When applying Thifen E-AG 75 WDG Herbicide as a burndown treatment in cotton, apply when a majority of weeds have emerged but at least 7 days prior to planting cotton. Allow at least 5 months between applications of Thifen E-AG 75 WDG Herbicide and cotton harvest.

#### **USE PRECAUTIONS**

Seedling disease, nematodes, cold weather, deep planting (more than 2"), excessive moisture, high salt concentration, and/or drought may weaken cotton seedlings and increase the possibility of crop injury. Cotton resumes normal growth once favorable conditions return.

- Do not apply after planting sorghum or rice.
- Do not apply later than 7 days before planting cotton.
- Do not allow livestock to graze on, or feed forage, hay or straw from treated soybean fields.
- Do not make more than one pre-plant or at-planting application of Thifen E-AG 75 WDG Herbicide to field corn, rice, sorghum, or soybeans per growing season.

- Do not apply more than 0.6 oz. of Thifen E-AG 75 WDG Herbicide to rice or grain sorghum pre-plant or at-planting.
- Do not apply more than 0.6 oz. of Thifen E-AG 75 WDG Herbicide per acre per growing season to field corn or soybeans. Application(s) to these crops can be made pre-plant/at-planting, and/or postemergence.

#### **APPLICATION INSTRUCTIONS**

Thifen E-AG 75 WDG Herbicide may be used as a burndown treatment prior to planting any crop; or shortly after planting, but prior to emergence of, wheat (including durum), barley, oat, triticale, soybeans and field corn (See the APPLICATION TIMING section of this label for restriction on planting intervals).

Apply Thifen E-AG 75 WDG Herbicide at 0.3 - 0.6 ounces per acre for control or partial control of the weeds listed below, except when planting to cotton where Thifen E-AG 75 WDG Herbicide can be applied at 0.2 - 0.33 ounces per acre. Use the 0.6 ounce per acre rate when weed infestation is heavy and predominantly consists of those weeds listed as partially controlled in the CEREALS section of this label, or when application timing and environmental conditions are marginal. Sequential treatments of Thifen E-AG 75 WDG Herbicide may also be made provided the total amount of Thifen E-AG 75 WDG Herbicide applied during one season does not exceed 1.0 ounce per acre.

Thifen E-AG 75 WDG Herbicide should be applied in combination with other suitable registered preplant burndown herbicides (See the TANK MIXTURES section of this label for additional information).

#### **TANK MIXTURES**

Thifen E-AG 75 WDG Herbicide may be used as a pre-plant burndown treatment alone or tank mixed with other herbicides that are registered for use as a pre-plant burndown product, including glyphosate (such as Roundup®), Landmaster® II, Fallow Master®, RT Master®, glyphosate plus dicamba (such as Banvel®/Clarity®) or dicamba (such as Banvel®/Clarity®) alone.

#### **POST HARVEST**

Thifen E-AG 75 WDG Herbicide may be used as a burndown treatment to crop stubble when the majority of weeds have emerged and are actively growing. (See the CROP ROTATION section of this label for additional information).

#### **APPLICATION INSTRUCTIONS**

Apply Thifen E-AG 75 WDG Herbicide at 0.3 - 0.6 ounces per acre to crop stubble after harvest. Use the 0.6 ounce per acre rate when weed infestation is heavy and predominantly consists of those weeds listed as partially controlled in the CEREALS section of this label or when application timing and environmental conditions are marginal. (See the APPLICATION TIMING section of this label for restriction on planting intervals). Thifen E-AG 75 WDG Herbicide should be applied in combination with other suitable registered burndown herbicides (See the TANK MIXTURES section of this label for additional information).

Sequential treatments of Thifen E-AG 75 WDG Herbicide may also be made provided the total amount of Thifen E-AG 75 WDG Herbicide applied during one fallow/pre plant cropland season does not exceed 1.0 ounce per acre.

## **TANK MIXTURES**

Thifen E-AG 75 WDG Herbicide may be used as a post harvest treatment to crop stubble, and should be tank mixed with other herbicides that are registered for use in fallow.

#### **CEREALS**

Do not use less than 0.3 ounces of Thifen E-AG 75 WDG Herbicide per acre.

To reduce the potential of crop injury in cereals, tank mix Thifen E-AG 75 WDG Herbicide with 2,4-D (refer to the TANK MIXTURES section) and apply after the crop is in the tillering stage of growth.

#### **WEEDS CONTROLLED**

Annual knawel	Marshelder
Annual sowthistle	Miners lettuce

Black mustard	Mouseear chickweed
Bushy wallflower/ Treacle mustard	Pennsylvania smartweed
Carolina geranium	Prickly lettuce 1,2,±
Coast fiddleneck	Prostrate knotweed
Common buckwheat	Redmaids
Common chickweed <sup>1</sup>	Redroot pigweed
Common cocklebur ±	Russian thistle <sup>1,2</sup>
Common groundsel	Scentless chamomile / mayweed
Common lambsquarter	Shepherdspurse
Common sunflower ±	Smallflower buttercup
Corn chamomile	Stinking mayweed / dogfennel
Corn spurrv	Swinecress
Cress (mouse-ear)	Tansy mustard <sup>1,</sup> ±
Curly dock	Tarweed fiddleneck
Cutleaf evening primrose ±	Tumble/ Jim Hill mustard
False chamomile	Volunteer lentils
Field pennycress	Volunteer peas
Flixweed	Volunteer sunflower <sup>1</sup>
Green smartweed	Wild buckwheat <sup>1</sup>
Henbit ±	Wild chamomile
Kochia <sup>1</sup>	Wild garlic <sup>1</sup>
Ladysthumb	Wild mustard
London rocket	Wild radish <sup>1,</sup> ±
Mallow (common) ±	
Mallow (little)	

See INSTRUCTIONS FOR SPECIFIC WEEDS below for more information.

- Naturally occurring resistant biotypes of kochia, prickly lettuce and Russian thistle are known to occur. See the TANK MIXTURES and SPECIFIC WEED PROBLEMS sections of this label for additional details.
- ± Partial control A visual reduction of weed population as well as a significant loss of vigor for individual weed plants. For best results, use 0.5 0.6 ounces Thifen E-AG 75 WDG Herbicide per acre and include a tank mix partner such as 2,4-D, MCP, bromoxynil (e.g., Buctril®, Bison®, Bronate or Bronate® Advanced), or dicamba (e.g., Banvel® / Clarity®). Refer to the TANK MIXTURES section for more information.

#### SPECIFIC INSTRUCTIONS FOR OATS

Apply 0.3 - 0.4 ounces of Thifen E-AG 75 WDG Herbicide per acre.

For winter oats, make applications after the crop is in the 2-leaf stage, but before the flag leaf is visible.

For spring oats, make applications after the crop is in the 3-leaf stage, but before jointing. Do not use on "Ogle", "Porter" or "Premier" varieties since crop injury can occur.

If the predominant weed(s) being treated are listed as partially controlled in the WEEDS CONTROLLED table, always include a tank mix partner (refer to the TANK MIXTURES section).

NOTE: Do not make more than one application of Thifen E-AG 75 WDG Herbicide per crop season.

## SPECIFIC INSTRUCTIONS FOR WHEAT, BARLEY AND TRITICALE

Make applications after the crop is in the 2-leaf stage, but before the flag leaf is visible.

Apply 0.5 ounces of Thifen E-AG 75 WDG Herbicide per acre to wheat (including durum), barley or triticale.

Use 0.6 ounces per acre when weed infestation is heavy and predominately consists of those weeds listed as partially controlled, or when application timing and environmental conditions are marginal (refer to the GENERAL INFORMATION section).

Use 0.3 ounces per acre when weed infestation is light and predominately consists of weeds listed as controlled, and when optimum application conditions occur.

Sequential treatments of Thifen E-AG 75 WDG Herbicide may be made provided the total amount of Thifen E-AG 75 WDG Herbicide applied to the crop does not exceed 1.0 ounce per acre.

### **INSTRUCTIONS FOR SPECIFIC WEEDS**

	Application Rate	
Weed	(ounces/ acre)	Instructions
Common Chickweed Wild Buckwheat	0.5	Apply with a surfactant when all or the majority of weeds have germinated and are past the cotyledon stage. Weeds should be less than 3 inches tall or across at the time of application.
Kochia	Refer to the TANK MIXTURES section for details on rates and restrictions	Apply in the spring when kochia are less than 2" tall and are actively growing. Naturally occurring biotypes resistant to Thifen E-AG 75 WDG Herbicide are known to occur. For best results use Thifen E-AG 75 WDG Herbicide in a tank mix with Starane®, Starane®+Salvo®, Starane®+Sword®, dicamba (such as Banvel®/Clarity®) and 2,4-D or MCP (ester or amine), or bromoxynil containing products (such as Buctril®, Bison®, Bronate®, Bronate® Advanced or Widematch®).
Tansymustard	0.5 - 0.6	Tank mix with 2,4-D or MCPA. Refer to the TANK MIXTURES section of this label for more information.
Russian Thistle Prickly Lettuce	Refer to the TANK MIXTURES section for details	Apply in the spring when Russian thistle and prickly lettuce are less than 2" tall or 2" across and are actively growing (refer to the TANK MIXTURES section of this label for additional details on rates and
Weed	Application Rate (ounces <i>l</i> acre)	Instructions
	on rates and restrictions	restrictions). Naturally occurring biotypes resistant to Thifen E-AG 75 WDG Herbicide of these weeds are known to occur. For best results, use in a tank mix with dicamba (such as Banvel®/Clarity®) and 2,4-D or MCP (ester or amine), or bromoxynil containing product such as Buctril®, Bison®® Bronate®, Bronate® Advanced or Rhino and 2,4-D (3/4 to 1 pint Buctril + ½ to 3/8 lb. active 2,4-D ester).
Wild Garlic	0.5 -0.6	Apply with a surfactant when wild garlic plants are less than 12 inches tall with 2 - 4 inches of new growth. Thorough coverage of all garlic plants is essential. For severe infestations, use the higher application rate recommended. Control may be reduced when plants are hardened-off by cold weather and/or drought stress. Control is enhanced when applications are made during warm temperatures to actively growing wild garlic plants. Typical symptoms of dying wild garlic plants (discoloration and collapse) may not be noticeable for 2-5 weeks.  NOTE: Tank mixing Thifen E-AG 75 WDG Herbicide with metribuzin may result in reduced control of wild garlic.
Wild Radish	0.5 -0.6	Apply with a surfactant to wild radish rosettes less than 6 inches in diameter either in the fall or spring. Applications made later than 30 days after weed emergence will result in partial control. Fall applications should be made prior to hardening-off of plants.
SU/IMI Tolerant Volunteer Sunflower	Refer to the TANK MIXTURES section for details on rates and restrictions	Control may not be adequate because varieties resistant to SU and IMI products (like Express®, Beyond®, Pursuit®, Raptor®) are under development. For best results, use Thifen E-AG 75 WDG Herbicide in a tank mix with Starane®, Starane®+Salvo®, Starane®+Sword®, dicamba (such as Banvel®/Clarity®) and 2,4-D or MCP (ester or amine), or bromoxynil containing products (such as Buctril®, Bison®, Bronate®, Bronate® Advanced).

## TANK MIXTURES

Read and follow all manufacturers' label recommendations for any companion herbicides, fungicides, and/or insecticides. If those recommendations conflict with this label, do not tank mix that product with Starane®, Starane®+Salvo®, Starane®+Sword®, dicamba (such as Banvel®/Clarity®) and 2,4-D or MCP (ester or amine), or bromoxynil containing products (such as Buctril®, Bison®, Bronate®, Bronate® Advanced). Read and follow all label instructions on timing, precautions, and warnings for any companion products before using these tank mixtures. Follow the most restrictive labeling.

Tank Mix Partner	Instructions
	May be tank mixed with these products for application to wheat, barley, oat, triticale or fallow.
2,4-D (amine or ester)	For best results in the Red River Valley and adjacent areas of North Dakota and Minnesota, add the ester formulations of 2,4-D or MCPA herbicides to the tank at 3/8 lb active ingredient (such as $3/4$ pint of a 4 lb/gal product, $1/2$ pint of a 6 lb/gal product). No additional surfactant is needed with this mixture.
or MCPA (amine or ester)	For best result, in other areas, add the ester formulations of 2,4-D or MCP herbicides to the tank at ¼ to 3/8 lb active ingredient (such as ½ to ¾ pint of a 4 lb/gal product, 1/3 to ½ pint of a 6 lb/gal product). Nonionic surfactant may be added to the mixture at ½ to 1 quart per 100 gal of spray solution (0.125 to 0.25% v/v); however, adding nonionic surfactant may increase the potential for crop injury, especially at the higher phenoxy rates. Higher rates of 2,4-D or MCP may be used but do not exceed the highest rate allowed by those respective labels.
Dicamba (e.g., Banvel®/Clarity®)	Thifen E-AG 75 WDG Herbicide may be tank mixed with 1/16 to 1/8 lb active ingredient dicamba (such as 2-4 fluid ounces Banvel® or 2-4 fluid ounces Clarity®). Use higher rates when weed infestation is heavy. Nonionic surfactant may be added to the mixture at ½ to 1 quart per 100 gal of spray solution (0.125 to 0.25% v/v); however, adding nonionic surfactant may increase the potential for crop injury. Refer to the specific dicamba label for application timing and restrictions.  NOTE: Tank mixes of Thifen E-AG 75 WDG Herbicide with dicamba may result in
Tank Mix Partner	Instructions
	reduced control of some broadleaf weeds.
2,4-D (amine or ester) and Dicamba	Thifen E-AG 75 WDG Herbicide may be applied in a 3-way tank mix with formulations of dicamba and 2,4-D or MCP. Make application of Thifen E-AG 75 WDG Herbicide plus 1/16 to 1/8 lb active ingredient dicamba (such as 2-4 fluid ounces Banvel® or 2-4 fluid ounces Clarity®) plus ¼ to 3/8 lb active ingredient 2,4-D or MCP ester or amine per acre. Use higher rates when weed infestation is heavy. Nonionic surfactant may be added to the mixture at ½ to 1 quart per 100 gal of spray solution (0.125 to 0.25% v/v); however, adding nonionic surfactant may increase the potential for crop injury. Apply this three-way combination to winter wheat and winter oat after the crop is tillering and prior to jointing (first node).  In Spring Wheat (including Durum) and Spring Oat, apply after the crop is tillering and before it exceeds the 5-leaf stage.  In Spring Barley, apply after the crop is tillering and before it exceeds the 4-leaf stage.
Bromoxynil (e.g., Buctril®, Bison®, Bronate®, Bronate® Advanced or Rhino®)	Thifen E-AG 75 WDG Herbicide may be tank mixed with bromoxynil containing herbicides registered for use on wheat, barley or triticale. For best results, add bromoxynil containing herbicides to the tank at 3/16-3/8 lb active ingredient per acre (such as Bronate® or Bison® at ¾-1 ½ pt. per acre).  NOTE: Tank mixes of Thifen E-AG 75 WDG Herbicide with bromoxynil may result in reduced control of Canada thistle.
Starane®, Starane®+Salvo®® Starane®+Sword	For improved control of Kochia (2-4" tall) Thifen E-AG 75 WDG Herbicide may be tank mixed with 1/3 to 1 1/3 pints per acre of Starane®, 2/3 to 1 2/3 pints per acre of Starane®+Salvo®, ¾ to 2 ¾ pints per acre of Starane®+Sword®.  2,4-D and MCP herbicides (preferably ester formulations) may be tank mixed with Thifen E-AG 75 WDG Herbicide plus Starane®. Consult local recommendations and the TANK MIXTURES section of this label for additional information.
Maverick®	Thifen E-AG 75 WDG Herbicide can be tank mixed with Maverick® herbicide for improved control of weeds in wheat. Refer to the Maverick® label for information regarding use restrictions, labeled crops, rotational cropping recommendations, sprayer cleanup, use precautions and other information. The most restrictive provisions on either label will apply. Do not use the tank mix if any restrictions on the Maverick® label conflict with the recommendations on this label.
Aim®	Thifen E-AG 75 WDG Herbicide can be tank mixed with Aim® herbicide for improved control of weeds in wheat and barley. Refer to the Aim® label for information regarding use restrictions, labeled crops, rotational cropping recommendations, sprayer cleanup, use precautions and other information. The most restrictive provisions on either label will apply. Do not use the tank mix if any restrictions on the Aim® label conflict with the recommendations on this label.

Stinger® or Curtail® or Curtail® M or Widematch®	Thifen E-AG 75 WDG Herbicide can be tank mixed with Stinger® or Curtail® or Curtail® M or WideMatch® herbicide for improved control of weeds in wheat and barley. Refer to the Stinger® or Curtail® or Curtail® M or WideMatch® labels for information regarding use restrictions, labeled crops, rotational cropping recommendations, sprayer cleanup, use precautions and other information. The most restrictive provisions on either label will apply.  NOTE: Do not use the tank mix if any restrictions on the Stinger® or Curtail® or Curtail® M or WideMatch® labels conflict with the recommendations on this label.
Express® or Express® XP Herbicide	Thifen E-AG 75 WDG Herbicide may be tank mixed with Express® or Express® XP based on local recommendations.
Ally® or Ally® XP Herbicide	Thifen E-AG 75 WDG Herbicide may be tank mixed with Ally® or Ally® XP based on local recommendations.
Assert® Herbicide or Avenge® Herbicide	Thifen E-AG 75 WDG Herbicide can be tank mixed with Avenge® or Assert®. When tank mixing Thifen E-AG 75 WDG Herbicide with Assert®, always include another broadleaf weed herbicide with a different mode of action (for example 2,4-D ester, MCP ester or bromoxynil (such as Buctril®, Bison®, Bronate® or Bronate® Advanced). NOTE: Applications of Thifen E-AG 75 WDG Herbicide plus Assert® may cause temporary crop discoloration, stunting, or injury when heavy rainfall occurs shortly after application.
Discover® NG	Thifen E-AG 75 WDG Herbicide can be tank mixed with Discover® NG herbicide for improved control of weeds in spring wheat. Refer to the Discover® NG label for

Tank Mix Partner	Instructions
	information regarding use restrictions, labeled crops, rotational cropping recommendations, sprayer cleanup, use precautions and other information. The most restrictive provisions on either label will apply.
	NOTE: Do not use the tank mix if any restrictions on the Discover® NG label conflict with the recommendations on this label.
Everest®	Thifen E-AG 75 WDG Herbicide can be tank mixed with Everest® herbicide for improved control of weeds in spring wheat. Refer to the Everest® label for information regarding use restrictions, labeled crops, rotational cropping recommendations, sprayer cleanup, use precautions and other information. The most restrictive provisions on either label will apply.
	NOTE: Do not use the tank mix if any restrictions on the Everest® label conflict with the recommendations on this label.
	A tank mix of Hoelon® 3EC herbicide+ Thifen E-AG 75 WDG Herbicide can be applied for annual ryegrass (in the Pacific Northwest only), wild oat and broadleaf weed control in winter and spring wheat, and spring barley. The Hoelon® 3EC herbicide rate should be 2 2/3 pints per acre with up to 0.5 ounce per acre Thifen E-AG 75 WDG Herbicide in spring and winter wheat.
Hoelon®	A three way tank mix of Hoelon® 3EC herbicide+Buctril® herbicide+ Thifen E-AG 75 WDG Herbicide can be applied for annual ryegrass (in the Pacific Northwest only), wild oat and broadleaf weed control in winter and spring wheat, and spring barley. The Hoelon® 3EC herbicide rate should be 2 2/3 pints per acre with up to 0.5 ounce per acre Thifen E-AG 75 WDG Herbicide in winter wheat (up to 0.4 ounce per acre in spring wheat and spring barley). Buctril® herbicide should be used at 1 pint per acre.
	The tank mixture should only be used under good soil moisture conditions when wild oats are in the 1 to 4 leaf stage. Reduced control of foxtail is likely when tank mixing Hoelon® with Thifen E-AG 75 WDG Herbicide. When foxtail is the major grassy weed in the field, DO NOT tank mix Hoelon® 3EC herbicide+ Thifen E-AG 75 WDG Herbicide -Use sequential treatments. Be sure to follow all use directions, warnings and cautions on the EPA approved Hoelon® 3EC and Buctril® labels.
	Thifen E-AG 75 WDG Herbicide can be tank mixed with Achieve® for wild oat control. This tank mix may also include 2,4-D ester, MCPA ester, bromoxynil or bromoxynil/MCPA for greater spectrum of broadleaf control-see Achieve® label for specific use directions and restrictions on tank mixes.
Achieve®	To minimize the reduction in wild oat control, use the higher rates of Achieve® when using rates of Thifen E-AG 75 WDG Herbicide greater than 0.3 ounce per acre.
	Read and follow all label instructions on tank mixes, application timing, precautions, and warnings on the Achieve® label.
	NOTE: Green foxtail, yellow foxtail, Persian darnel and other grass weeds will not be controlled by this tank mix.
D	Thifen E-AG 75 WDG Herbicide can be tank mixed with Puma® 1EC for control of some annual grass weeds. This tank mix may also include MCPA ester bromoxynil or bromoxynil/MCPA for greater spectrum of broadleaf control-see Puma® 1EC label for specific use directions and restrictions on tank mixes.
Puma®	NOTE: Read and follow all label instructions on the EPA approved Puma® 1EC label for tank mixes, application timing, precautions, and restrictions. If those recommendations conflict with this label, do not tank mix the product with Thifen E-AG 75 WDG Herbicide.
Tiller®	Thifen E-AG 75 WDG Herbicide can be tank mixed with Tiller® for green foxtail, foxtail millets and volunteer corn control. Refer to the Tiller® label for information regarding use restrictions, labeled crops rotation cropping recommendations, sprayer cleanup, use precautions and other information. The most restrictive provision on either label will apply.
	NOTE: Do not use the tank mix if any restrictions on the Tiller® label conflict with the recommendations on this label.
Other Grass Control Products	Thifen E-AG 75 WDG Herbicide can be tank mixed with grass control products. Antagonism generally does not occur. However, Etigra recommends that you first consult your state experiment station, university, or extension agent, Agricultural

Tank Mix Partner	Instructions
	dealer, or Etigra representative as the potential for antagonism before using the mixture. If no information is available, limit the initial use of Thifen E-AG 75 WDG Herbicide and the grass product to a small area.
Fungicides	Thifen E-AG 75 WDG Herbicide may be tank mixed or used sequentially with fungicides registered for use on cereal grains.
	Thifen E-AG 75 WDG Herbicide may be tank mixed or used sequentially with insecticides registered for use on cereal grains.
Insecticides	However, under certain conditions (drought stress, cold weather or if the crop is in the 2-4 leaf stage), tank mixes or sequential applications of Thifen E-AG 75 WDG Herbicide with organophosphate insecticides (such as Lorsban®) may produce temporary crop yellowing or, in severe cases, crop injury. The potential for crop injury is greatest when wide fluctuations in day/night temperatures occur just prior to or soon after application. Test these mixtures in a small area before treating large areas.
	NOTE: Do not apply Thifen E-AG 75 WDG Herbicide within 60 days of crop emergence where an organophosphate insecticide has been applied as an in-furrow treatment because crop injury may result.
	Using Thifen E-AG 75 WDG Herbicide with Malathion® will result in crop injury.
	Liquid nitrogen fertilizer solutions may be used as a carrier in place of water. Run a tank mix compatibility test before mixing Thifen E-AG 75 WDG Herbicide in fertilizer solution.
	Thifen E-AG 75 WDG Herbicide must first be slurried with water and then added to liquid nitrogen solutions (e.g., 28-0-0, 32-0-0). Ensure that the agitator is running while the Thifen E-AG 75 WDG Herbicide is added. Use of the mixture may result in temporary crop yellowing and stunting.
	If using low rates of liquid nitrogen fertilizer in the spray solution (less than 50% of the spray solution volume), the addition of surfactant is necessary. Add surfactant at $\frac{1}{2}$ pint-1 quart per 100 gal of spray solution (0.06-0.25% v/v) based on local recommendations.
Liquid Nitrogen Solution	When using high rates of liquid nitrogen fertilizer in the spray solution, adding surfactant increases the risk of crop injury. Consult your agricultural dealer, consultant, fieldsman, or Etigra representative for a specific recommendation before adding an adjuvant to these tank mixtures.
Fertilizer	If 2,4-D or MCPA is included with Thifen E-AG 75 WDG Herbicide and the fertilizer mixture, ester formulations tend to be more compatible (See manufacturer's label). Additional surfactant may not be needed when using Thifen E-AG 75 WDG Herbicide in tank mix with 2,4-D ester or MCP ester and liquid nitrogen fertilizer solutions. Consult your agricultural dealer, consultant, field advisor, or Etigra representative for a specific recommendation before adding an adjuvant to these tank mixtures.
	NOTES:
	In certain areas east of the Mississippi river unacceptable crop response may occur with use of straight or dilute nitrogen fertilizer carrier solutions where cold temperatures or widely fluctuating day <i>I</i> night temperatures exist. In these areas consult your agricultural dealer, consultant, field advisor, or Etigra representative for a specific recommendation before using nitrogen fertilizer carrier solutions.
	Liquid nitrogen fertilizer solutions that contain sulfur can increase crop response.
	Do not use low rates of liquid fertilizer as a substitute for a surfactant.
	Do not use with liquid fertilizer solutions with a pH less than 3.0.

## SOYBEANS

Apply Thifen E-AG 75 WDG Herbicide to soybeans to control the following weeds:

<u>Weed</u>	<b>Maximum Size at Application</b>
Annual Smartweeds	6" tall
Cocklebur ±	6" tall
Jimsonweed ±	4" tall

Lambsquarters4" tallPigweed, Rough (red root)12" tallPigweed, Other species8" tallVelvetleaf6" tallWild Mustard4" in diameterWild Sunflower ±6" tall

± Partial control - A visual reduction of weed population as well as a significant loss of vigor for individual weed plants.

NOTE: For a listing of weeds controlled using applications of 1/3 oz of this product in STS® soybeans, refer to WEEDS CONTROLLED in the CEREALS section.

#### **APPLICATION INSTRUCTIONS**

Apply a single application of Thifen E-AG 75 WDG Herbicide at a rate of 1/12 (0.083) ounces per acre on conventional soybean varieties. Thifen E-AG 75 WDG Herbicide may be applied to soybeans any time after the first trifoliate has expanded fully. Apply no later than 60 days before harvest.

On soybeans designated STS®, Thifen E-AG 75 WDG Herbicide may be applied at rates up to 1/3 ounce per acre. Severe injury or death of soybeans will result if any soybeans not designated as STS® are treated with more than 1/12 ounce of Thifen E-AG 75 WDG Herbicide. Multiple applications of Thifen E-AG 75 WDG Herbicide may be applied to STS® soybeans provided no more than a total of 1/3 ounce is applied per season.

#### **SPRAY ADDITIVES**

Applications of Thifen E-AG 75 WDG Herbicide in soybeans must include a nonionic surfactant or crop oil concentrate, and an ammonium nitrogen fertilizer. Refer to the ADJUVANTS section below for more information.

## **TANK MIXTURES**

Thifen E-AG 75 WDG Herbicide may be tank mixed with full or reduced rates of other products registered for use in soybeans. However, Etigra will not warrant crop safety or weed control of Thifen E-AG 75 WDG Herbicide tank mixtures with any other pesticide or spray adjuvant except as specified in this label or other Etigra supplemental labeling or technical bulletins.

Early season soybean injury may result from tank-mix applications with other registered herbicides. Injury may manifest itself as stunting (seen as a reduction in leaf size or internode length), yellowing leaves and/or red veins, and necrosis in the leaves and petioles. The potential for soybean injury is most pronounced with applications made during hot, humid conditions, under widely fluctuating weather or temperature conditions, or with applications to soybeans under stress.

Do not tank mix Thifen E-AG 75 WDG Herbicide with organophosphate insecticides, or apply Thifen E-AG 75 WDG Herbicide within 14 days before or after an application of an organophosphate insecticide, as severe crop injury may occur.

#### **Postemergence Grass Herbicides**

Thifen E-AG 75 WDG Herbicide may be tank mixed with postemergence grass herbicides such as Assure® II herbicide. With postemergence grass herbicides, surfactant rate (concentration) should be 1-2 pints per 100 gallons of spray solution (0.125-0.25% v/v concentration). Use of a higher rate of nonionic surfactant, particularly under hot, humid conditions, may result in temporary crop injury. Do not use crop oil concentrate when tank mixing Thifen E-AG 75 WDG Herbicide with postemergence grass herbicides unless specified on other Etigra supplemental labeling. Include a nonionic surfactant with the tank mix of Thifen E-AG 75 WDG Herbicide and post grass herbicides such as Assure® II herbicide.

## **Glyphosate**

Thifen E-AG 75 WDG Herbicide may be tank mixed with glyphosate for control of certain broadleaf weeds in Roundup Ready® or Roundup Ready® X STS® stacked trait soybeans. For tank mixtures of Thifen E-AG 75 WDG Herbicide plus glyphosate herbicide, always read and follow all use directions, restrictions, and precautions on the EPA approved labels. When tank mixing, the most restrictive labeling applies.

#### **ADJUVANTS**

When tank mixing Thifen E-AG 75 WDG Herbicide with glyphosate, it is recommended to add ammonium sulfate (AMS) at 4.25-17 lb per 100 gal of spray mixture. See the glyphosate manufacturer's label for specific ammonium nitrogen recommendations. When velvetleaf is present, ammonium sulfate is required at a minimum rate of 2 lb per acre.

The addition of surfactant at 0.125-0.25% v/v (1-2 pt per 100 gal spray mixture) to some Thifen E-AG 75 WDG Herbicide plus glyphosate tank mixes will improve weed control when glyphosate products are used that do not contain built-in adjuvant systems. "Glyphosate" products differ in their adjuvant contents. "Glyphosate" products such as Glyphomax® or Roundup® Original allow for addition of surfactants. See the manufacturer's specific surfactant recommendations.

#### SEQUENTIAL APPLICATIONS IN SOYBEANS

Before making applications of Thifen E-AG 75 WDG Herbicide to soybeans previously treated with other herbicides, ensure that the soybeans are free from stress (caused by herbicides or environmental factors) and actively growing.

#### FIELD CORN

Apply Thifen E-AG 75 WDG Herbicide to 2-6 leaf field corn (1-5 collars, up to 16 inches tall) to control the following weeds:

WEED	MAXIMUM SIZE
Velvetleaf	6" tall
Pigweed species	12" tall
Lambsquarters	4" tall
Annual smartweeds	6" tall
Wild mustard	4" diameter

#### **USE PRECAUTIONS**

- Do NOT apply by air in New York state. In New York state, application of this product is limited to ground applications only.
- Do NOT apply to field corn taller than 16 inches or 5 collars (whichever is most restrictive).
- Do NOT apply to sweet corn, popcorn or field corn grown for seed.
- Do NOT make more than one application per season.
- Do NOT apply this product through any type of irrigation systems.
- Do NOT graze or feed forage or grain from treated field corn to livestock within 30 days of application.
- Do NOT apply Thifen E-AG 75 WDG Herbicide to corn previously treated with Counter® 15G.
- Applications of Thifen E-AG 75 WDG Herbicide to corn previously treated with Counter® 20CR, Lorsban® or Thimet® may cause unacceptable crop injury, especially on soils of less than 4% organic matter.
- Applications of Thifen E-AG 75 WDG Herbicide to corn previously treated with Lorsban®, or other
  organophosphate insecticides not listed above, may result in temporary crop injury.

#### APPLICATION INFORMATION

Apply Thifen E-AG 75 WDG Herbicide at a rate of 1/12 (0.083) ounces per acre to weeds whose first true leaves are expanded but before the weeds have exceeded the sizes listed above. This product may be applied as a tank mixture with labeled rates of atrazine and glyphosate. Do not tank mix with other corn herbicides unless specified on Thifen E-AG 75 WDG Herbicide labels or technical bulletins.

Apply Thifen E-AG 75 WDG Herbicide to field corn hybrids with a Relative Maturity (RM) of 88 days or more (e.g., "food grade" (yellow dent, hard endosperm), waxy and high-oil corn). Because not all field corn hybrids of less than 88 days RM and not all white corn hybrids or Hi-Lysine hybrids have been tested

for crop safety, nor does Etigra have access to all seed company data, the user assumes all responsibility for injury arising from the use of Thifen E-AG 75 WDG Herbicide on these types of corn. Before applying Thifen E-AG 75 WDG Herbicide to any of these corn types, be sure to consult with your seed supplier.

#### **ADJUVANTS**

When using Thifen E-AG 75 WDG Herbicide, always add either nonionic surfactant at 0.25% v/v (1 qt/100 gal) or crop oil concentrate at 1% v/v (1 gal/100 gal) plus either ammonium nitrogen solution such as 28% UAN (2-4 qt/acre) or ammonium sulfate (2-4 lb/acre).

When tank mixing Thifen E-AG 75 WDG Herbicide with glyphosate, it is recommended to add ammonium sulfate (AMS) at 4.25-17 lb per 100 gal of spray mixture. See the glyphosate manufacturer's label for specific ammonium nitrogen recommendations. When velvetleaf is present, ammonium sulfate is required at a minimum rate of 2 lb per acre.

The addition of surfactant at 0.125-0.25% v/v (1-2 pt per 100 gal spray mixture) to some Thifen E-AG 75 WDG Herbicide plus glyphosate tank mixes will improve weed control when glyphosate products are used that do not contain built-in adjuvant systems. "Glyphosate" products differ in their adjuvant contents. "Glyphosate" products such as Glyphomax® or Roundup® Original allow for addition of surfactants. See the manufacturer's specific surfactant recommendations.

#### SOIL INSECTICIDE INTERACTIONS

Thifen E-AG 75 WDG Herbicide may interact with certain insecticides previously applied to the crop. Crop response varies with field corn type, insecticide used, insecticide application method, and soil type.

Thifen E-AG 75 WDG Herbicide may be applied to corn previously treated with Fortress®, Aztec®, Force® or non-organophosphate (OP) soil insecticides regardless of soil type.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved wasted disposal facility.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, 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.

#### CONDITION 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. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Etigra or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Etigra and Seller harmless for any claims relating to such factors.

Etigra 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 the Directions for Use. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or Etigra, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ETIGRA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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