



A nonselective burndown herbicide with the active ingredient TERGEO™

ACTIVE INGREDIENT: TIAFENACIL*	70.0 %
OTHER INGREDIENTS	30.0 %
TOTAL.....	100.0 %

* methyl N-[2-[[[2-chloro-5-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluorophenyl]thio]-1-oxopropyl]-β-alaninate

Gamma is formulated as a water dispersible granule (WG) and contains 0.70 pounds of active ingredient per pound of formulated product.

EPA Reg. No. 71512-36-74530

KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

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.)

SEE BELOW FOR FIRST AID AND PRECAUTIONARY STATEMENTS.
READ ENTIRE LABEL CAREFULLY AND USE ONLY AS DIRECTED.

Manufactured For **HELM Agro US, Inc.** • 401 E. Jackson St., Suite 1400 • Tampa, FL 33602

PRECAUTIONARY STATEMENTS

Hazard to Humans and Domestic Animals

CAUTION: Harmful if swallowed or absorbed through skin. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

FIRST AID	
If swallowed	<ul style="list-style-type: none"> • 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.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER

For **24-Hour Medical Emergency Assistance** call
National Poison Control Center at 1-800-222-1222.

For **Chemical Emergency, Spill, Leak, Fire or Accident**, call **CHEMTREC 1-800-424-9300.**

Personal Protective Equipment (PPE)

Applicators and other handlers must wear: waterproof gloves, long-sleeved shirt and long pants and shoes plus socks.

Engineering Controls

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

User Safety Requirements

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

USERS SHOULD: Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, areas where surface water is present, or intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

Ground Water Advisory

Tiafenacil has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory

Tiafenacil may impact surface water due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow groundwater. This chemical is classified as having high potential for reaching surface water via runoff for several days after application. A level, well-maintained buffer strip between areas to which this chemical is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of this chemical from runoff water and sediment. Runoff of this chemical will be reduced by avoiding application when rainfall is forecast to occur within 48 hours.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at time of herbicide application.

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 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 12 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, and shoes plus socks.

Gamma must be used only in accordance with directions on this label. To the extent consistent with applicable law, HELM Agro will not be responsible for losses or damage resulting from use of this product in any manner not specifically directed by HELM Agro.

PRODUCT INFORMATION

Weed Efficacy Information:

Postemergence Activity. Gamma is a nonselective contact (burndown) herbicide used to control or suppress a broad spectrum of emerged broadleaf and grass weeds. Gamma has excellent burndown activity on most young (generally less than 5 inches tall) annual weeds and suppresses the growth of perennial weeds by desiccating green foliage.

- Gamma must be applied with an adjuvant for optimum burndown activity (refer to adjuvant section for details).
- It is essential to obtain complete coverage of target weeds for adequate weed control. Inadequate coverage of target weeds, improper application technique, and/or application to mature, large (taller than 5 inches), stressed, or mown weeds will usually result in unacceptable weed control.
- Burndown activity may be slowed or reduced under cloudy and/or foggy or cooler weather conditions, or when weeds are growing under drought or other stress conditions.

Preemergence Activity. Gamma rapidly degrades following application and as a result, Gamma has no preemergence activity.

Mode of Action (MOA) Information:

Gamma is classified as a Group 14 (WSSA) or Group E (HRAC) herbicide and is rapidly absorbed by emerged, actively growing, and susceptible green plant tissue. Once Gamma is absorbed by green plant tissue, inhibition of protoporphyrinogen oxidase (PPO) results in rapid disintegration and drying of plant tissue. Chlorosis and necrotic symptoms usually develop within hours after application and death of susceptible weeds occurs within a few days.

Crop Tolerance Information:

Crops listed on this label are tolerant to Gamma when applied according to the labeled directions and under normal environmental conditions.

- Crop injury may occur under stressful growing conditions.
- Crop injury will occur if Gamma is applied postemergence (over the top) to the crop.
- In fields where poor row closure (during planting) and/or soil cracking is common, applicators should be watchful for cases where the crop emergence within the open planting row or within soil cracks. If Gamma is applied when the crop has emerged within open planting row or within soil cracks (between the soil walls), Gamma will likely contact and injure the crop.
- In directed-postemergence (perennial crop) uses, Gamma will cause crop injury if the spray solution drifts into the crop canopy.

Rotational Crop Information:

Table 1 indicates the interval between application of Gamma and planting of rotational crops or replanting after crop failures. In case of tank mix, use the most restrictive interval of all products applied.

Table 1 Rotational crop and replanting intervals by Gamma application rate

Crop	Gamma Rate (oz/A)		
	0.5	1	1.5
	Rotational Crop Interval		
	(Days after application)		
Corn	0	0	0
Wheat	0	0	0
Soybean	14	14	14
Cotton	14	14	14
Sugarbeet	30	30	60
Other crops	120	150	180

PRODUCT CROP USE & APPLICATION INSTRUCTIONS:

Gamma is registered for directed-postemergence burndown use in grape.

Restrictions

- DO NOT apply this product to residential areas.
- DO NOT apply this product by air.
- DO NOT apply this product through any type of irrigation system.

For any combination of cropping systems, DO NOT apply more than a maximum cumulative amount of 0.223 lb ai per acre per year.

Spray Carrier:

Always use clean water (free of mud or clay) when applying Gamma.

Spray Volume:

The minimum spray volume for applications of Gamma is 10 gallons of final spray solution per acre. Adequate spray coverage is essential for optimal weed control. When targeting dense weed populations and/or larger weeds, use higher spray volumes (e.g. 15 to 20 gallons of final spray solution per acre).

Nozzle Selection

The use of flat-fan nozzles will result in the most effective application of Gamma. Review and follow restrictions from the spray drift management section.

Application Timing and Rates:

For Gamma application timing and rates, see instructions listed for each use.

Adjuvants:

Always use a methylated seed oil/crop oil concentrate (MSO/COC) or nonionic surfactant (NIS) at the recommended rate when applying Gamma or reduced performance will occur. When using a MSO/COC, always use a product that contains at least 80% high quality petroleum (mineral) or modified vegetable oil with at least 15% surfactant emulsifier. MSO/COC can be applied at a concentration equal to 1% v/v (1 gallon per 100 gallon spray volume) of the final spray volume. When using a NIS, always use nonionic surfactant containing at least 60% nonionic surfactant. NIS can be applied at a concentration equal to 0.25% v/v (2 pints per 100 gallon spray volume) of the final spray volume.

The addition of an ammonium nitrogen fertilizer, either a 28% or 32% N urea ammonium nitrate (UAN) or a spray grade ammonium sulfate (AMS), to the final spray solution is allowed. If UAN or AMS is added to the spray mixture, add UAN at a concentration of 2.5% v/v (2.5 gallons per 100 gallons or spray volume) and add AMS at a concentration of 8.5 lbs product per 100 gallons of the final spray volume. Do not use liquid nitrogen fertilizer as the total carrier solution.

Adjuvant Mixtures – Combinations of adjuvant products may be used at doses that are relative to the adjuvant recommendations above. It is the user's responsibility to understand whether or not the adjuvant mixture quality is equal to or better than the addition of MSO/COC, NIS, and/or fertilizer at the recommended rates above.

Tank Mixture Information:

Read and follow all label directions for each tank mixture herbicide. It is the pesticide user's responsibility to ensure that all tank mixture products are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in the tank mixture. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

For tank mixtures, add individual components to the spray tank in the following sequence: water, dry formulated products, liquid formulated products (except in the case of glyphosate or glufosinate which should be added after liquid fertilizer or ammonium sulfate is dispersed), fertilizer (dry and/or liquid), and then adjuvants.

Gamma is generally compatible with fertilizers and micronutrient products, provided sufficient free water is available for dispersion of all the tank mixture products. Use tank mixture combinations only when applicator experience indicates that the tank mixture will not result in objectionable crop injury. However, the physical compatibility of Gamma with tank mix partners should be evaluated before use (see compatibility test instructions).

Compatibility Test

Additives and tank mixtures should be tested for compatibility by mixing in a small container prior to mixing in spray tank.

In a glass jar (~1 quart size), add all mix partners, in their relative proportions. Invert, shake or mix the jar thoroughly. If mixture forms precipitates (flakes or sludge), gels, balls up or forms oily films or layers, this indicates incompatibility. Though signs of incompatibility will typically be seen within 5 minutes of mixing, mixture should be observed for approximately 30 minutes.

Compatibility agents can be used to facilitate mixing. Add ¼ teaspoon of the compatibility agent to the mix (assuming a mixing rate of 2 pints compatibility agent per 100 gallons spray mix). If compatibility agents do not facilitate mixing, the mixture is incompatible and should not be used.

Sprayer Mixing:

Mixing and Loading Instructions. Prepare no more spray mixture than is needed for the immediate application and avoid overnight storage of Gamma in spray mixtures.

1. Ensure the spray system is free of residues from previous applications.
2. Fill the tank 1/2 full of clean water.
3. Turn on the tank agitation system.
4. Add the required amount of Gamma and continue agitation until the Gamma is completely dispersed.
5. As the tank is filling, add the required spray adjuvants.

Agitation should be maintained during mixing and application.

Sprayer Calibration

Equipment should be calibrated regularly according to manufacturer's specifications. Review and follow restrictions from the spray drift management section.

Spray Drift Management

- Applicators must select nozzle and pressure that deliver medium or coarser droplets as indicated in nozzle manufacturers' catalogs and in accordance with American Society of Agricultural & Biological Engineers Standard 572 (ASABE S572).
- Do not apply more than 2 feet above the ground or plant foliage canopy.
- Do not apply when wind speeds at the application site exceed 10 miles per hour.
- Do not apply during temperature inversions.

Spray Drift Advisories

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator prioritizes between drift control and coverage.

Importance of Droplet Size:

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions.

Droplet Size Management:

Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

Pressure – Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use a higher-capacity nozzle instead of increasing pressure.

Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

Boom Height:

Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

Wind:

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Avoid applications during gusty or windless conditions.

Note: Local terrain can influence wind patterns. Every applicator needs to be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity:

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

Temperature Inversions:

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified 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.

Spray Tank Cleaning

Clean application equipment thoroughly by using a strong detergent or commercial spray cleaner according to the manufacturer's direction, followed by triple rinsing the equipment before and after applying this product.

PRODUCT STEWARDSHIP INFORMATION

Resistance Management

Gamma herbicide is a Group 14 herbicide that inhibits the protoporphyrinogen oxidase (PPO) enzyme in plants. Any weed population may contain or develop plants naturally resistant to Gamma and to several herbicide modes of action (triazine (Group 5), ALS (Group 2), PPO (Group 14), glyphosate (Group 9), auxin (Group 4), HPPD (Group 27) and etc.). The repeated use of herbicides with the same modes of action allow resistant weeds to be selected and spread.

To help delay the development and spread of resistance to PPO inhibitors (Group 14) and other mode of actions take one or more of the following steps:

- Rotate the use of Gamma or other Group 14 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.
- Fields should be scouted prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species.
- If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.
- If a weed population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact HELM Agro at 1-877-706-4640.

Always apply the full labeled rate and at the specified application timing listed on the label. Contact your local sales representative, crop advisor, or extension agent to determine if there is suspected PPO resistant weeds in your region. If PPO resistant biotypes of target weeds have been reported, use the specified application rates of this product for your conditions and add tank mix products so that there are multiple effective mechanisms of actions for each target weed.

To manage a known herbicide resistant weed population, it is important to use herbicides with varying effective modes of action as tank mix partners, in sequential applications within a growing season, and/or in a multi-year weed management plan.

Integrated Pest Management (IPM)

Gamma herbicide should be used as part of an integrated pest management strategy. Consult with local university extension and agricultural professionals for IPM strategies specific for your area.

Grape

The maximum single application rate is 1.5 oz per acre (0.067 lb ai per acre).

Do not exceed 4.5 ounces per acre per year (0.2 lb ai per acre per year).

Application Timing	Rate Range (oz/A)	Additional Information & Restrictions
Postemergence Burndown (Directed)	0.5 to 1.5	<ul style="list-style-type: none">• Apply as a directed spray using conventional low-pressure ground spray equipment.• Follow manufacture's recommendations for spraying pressure.• Review crop tolerance information section.• Review and follow restrictions from the spray drift management section.• Do not allow spray solution to contact green stems (except suckers) or foliage.• Do not apply to grapes established less than 2 years.• Do not reapply within 14 days.• Do not apply within 7 days of harvest.• Use higher rate for dense and/or mature weed infestations.• Always apply product with an effective tank mixture partner, if electing to use the low rate.

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: Do not contaminate water, food, or feed by disposal. Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling:

If product is in fiber drum with liner

Nonrefillable container. DO NOT use or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into formulation equipment. Then offer for recycling, if available, or dispose of liner in a sanitary landfill or by incineration, or other procedures approved by State and local authorities. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

If product is in foil bag

Nonrefillable outer bag. Do not reuse or refill the outer bag. Completely empty bag into application equipment then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or other procedures approved by State and local authorities.

If product is in plastic containers

Nonrefillable container. DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or dispose of empty container in a sanitary landfill or by incineration, or other procedures approved by State and local authorities.

LIMITATION OF WARRANTY AND DAMAGES

Seller warrants to those persons lawfully acquiring title to this product that at the time of first sale of this product by Seller that this product conformed to its chemical description and was reasonably fit for the express purposes stated on the label when used in accordance with Seller's directions under normal conditions of use as described on the label. To the extent consistent with applicable law, Buyers and users of this product assume the risk of any use contrary to such directions. **TO THE FULLEST EXTENT PERMITTED BY LAW, EXCEPT AS PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESS REFERENCE TO THIS LIMITATION OF WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY, AND SELLER EXPRESSLY DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE AND EXPRESSLY DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES THAT MAY EXIST UNDER APPLICABLE LAW, COURSE OF DEALING OR USAGE OF TRADE. NO AGENT OF SELLER IS AUTHORIZED TO GRANT ANY WARRANTY IN EXCESS OF THAT GRANTED IN THIS LIMITATION OF WARRANTY AND LIMITATION OF DAMAGES. TO THE FULLEST EXTENT PERMITTED BY LAW, IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT. TO THE FULLEST EXTENT PERMITTED BY LAW, SELLER'S LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT SHALL NOT EXCEED THE PURCHASE PRICE OF THE PRODUCT AS TO WHICH A CLAIM IS MADE.** To the fullest extent permitted by law, Buyers and users of this product are responsible for all loss or damage from use or handling of this product that results from conditions beyond the control of Seller, including, but not limited to, incompatibility with other products (unless otherwise expressly provided for in the Directions for Use of this product), weather conditions, cultural practices, moisture conditions or other environmental conditions outside of the ranges that are generally recognized as being conducive to good agricultural and/or horticultural practices.

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Gamma™ Specimen Label