



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

May 17, 2021

Bill Washburn
Registration Manager
Helena Chemical Company
225 Schilling Blvd., Suite 300
Collierville, TN 38017

Subject: Registration Review Label Mitigation for Clethodim
Product Name: TAPOUT
EPA Registration Number: 5905-578
Application Date: February 12, 2018
Decision Number: 554160

Dear Mr. Washburn:

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 Clethodim 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.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. 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.

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If you have any questions about this letter, please contact Srijana Shrestha by phone at 703-305-6471, or via email at shrestha.srijana@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington".

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

Enclosure: Stamped Label

Clethodim	Group	1	Herbicide
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TAPOUT®

Active Ingredient	By Wt.
*Clethodim	12.6%
Other Ingredients	87.4%
Total	100.0%

Contains Petroleum Distillates

*(E)-2-[1-[[[(3-chloro-2-propenyl)oxy]imino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one

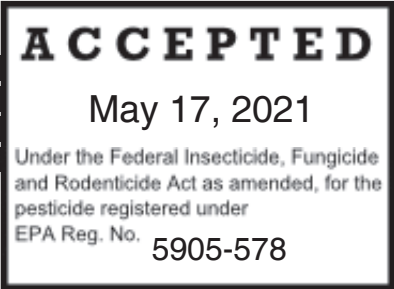
Contains 0.97 lbs. Clethodim per gal.

KEEP OUT OF REACH OF CHILDREN CAUTION

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 a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor immediately for advice
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
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 (800) 424-9300, collect day or night, for emergency medical treatment information.	
NOTE TO PHYSICIAN	
Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid, which can cause pneumonitis. If ingested, probable mucosal damage may contraindicate the use of gastric lavage. May pose an aspiration pneumonia hazard. Contains petroleum distillate.	

**SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS
AND COMPLETE DIRECTIONS FOR USE**

EPA Reg. No. 5905-578
EPA Est. No.
AD 102715
NET CONTENTS



Manufactured For
Helena Agri-Enterprises, LLC
225 Schilling Boulevard, Suite 300
Collierville, TN 38017



**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS & DOMESTIC ANIMALS
CAUTION**

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, or Viton ≥ 14 mils
- Shoes plus socks
- Protective eyewear

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 there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, and chewing gum, using tobacco or using the toilet.
- 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, or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** apply where runoff is likely to occur. Do not apply where weather conditions favor drift from areas treated. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

Non-Target Organism Advisory Statement:

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 following label directions intended to minimize spray drift.

PHYSICAL OR CHEMICAL HAZARDS:

DO NOT use or store near heat or open flame.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL AND PAMPHLET. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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 24 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 over short-sleeved shirt and short pants, chemical-resistant gloves such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, or Viton ≥ 14 mils and shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Keep all unprotected persons out of operating areas, or vicinity where there may be drift. **DO NOT** enter treated areas without protective clothing until sprays have dried.

STORAGE AND DISPOSAL

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

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

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance in proper disposal methods.

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

Non-Refillable (<5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. 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.

Non-Refillable (>5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. 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.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. 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.

Refillable Container (250 gallon & bulk): Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. 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.

TANK MIXES

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor.

Read and follow the entire label of each product to be used in the tank mix with this product.

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THE FOLLOWING STATEMENT ON CHEMIGATION WILL BE USED ONLY IF A SUPPLEMENTAL LABEL IS CREATED.

CHEMIGATION

[**DO NOT** apply this product through any irrigation system unless the supplemental labeling on chemigation is followed. Refer to supplemental labeling entitled, "Application of **TAPOUT** Onions (dry bulb and green) and Garlic by Chemigation", for use directions for chemigation.]

May be applied to onions and garlic by sprinkler irrigation systems. **DO NOT** apply by chemigation to any other crop, or to this crop using any other type of irrigation system.

PRODUCT INFORMATION

FOR USE ON: Alfalfa, Asparagus, Artichoke (Globe), Bean (dry) and Pea (shelled)¹, Bean and Pea (succulent shelled)², Broccoli, Bushberry³, Cabbage, Caneberry⁴, Canola*, Carrot, Cauliflower (and other Head and Stem Brassica Vegetables)⁵, Celery, Clover (grown in Idaho, Oregon and Washington only), Conifers, Cotton, Cranberry, Cucumber, Eggplant (and other Fruiting Vegetables)⁶, Fallow Land (and other non-producing agricultural areas), Field Corn**, Flax*, Garden Beet, Garlic, Herbs⁷, Hops, Horseradish (and other Root Vegetables)⁸, Legume Vegetables (edible podded)⁹, Lettuce, Head and Leaf (and other Leafy Greens)¹⁰, Melons (including Cantaloupe and Watermelon)¹¹, Mint, Mustard Greens (and other Leafy Brassica Greens)¹², Mustard Seed*, Non-Bearing Food Crops, Non-Crop or Non-Planted Areas, Onions (dry bulb and green), Ornamentals, Peach, Peanut (including perennial), Peppers (bell and non-bell), Potato, Radish, Rhubarb (and other Leaf Petioles)¹³, Safflower, Sesame, Shallot (dry bulb), Soybean, Squash (including Pumpkin)¹¹, Strawberry, Sugar Beet, Sunflower, Sweet Potato, Turnip Greens, Tomato and Yam (and other Tuberous and Corm Vegetables)¹⁴.

***Not for use in California **Not for use in California and New York**

¹ Other Bean (dry) and Pea (shelled) crops approved for use with **TAPOUT** include: Bean (*Lupinus* spp.), grain lupin, sweet lupin, white lupin and white sweet lupin; Bean (*Phaseolus* spp.), field, kidney, lima (dry), navy, pinto and tepary; Bean (*Vigna* spp.), adzuki bean, black-eyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, broad (dry), chickpea (garbanzo), guar, lablab bean and lentil; Pea (*Pisum* spp.), field and pigeon.

² Other Bean & Pea (succulent shelled) crops approved for use with **TAPOUT** include: Bean (*Phaseolus* spp.), broad bean (succulent), lima bean (green); Bean (*Vigna* spp.), black-eyed pea, cowpea, Southern pea; Pea (*Pisum* spp.), English pea, garden pea, green pea and pigeon pea.

³ Bushberry approved for use with **TAPOUT** include: Aronia Berry, Blueberry, Highbush; Chilean Guava, Cranberry, Highbush; Currant, Black; Currant, Buffalo; Currant, Native; Currant, Red; Elderberry, European Barberry, Gooseberry, Honeysuckle, Edible, Huckleberry, Jostaberry, Juneberry, Saskatoon Berry, Salal, Sea Buckthorn, Cultivars, varieties and/or hybrids of these

⁴ Caneberry approved for use with TAPOUT include Blackberry, Loganberry, Raspberry, Black Raspberry, Red Raspberry, Wild Cultivars, varieties and/or hybrids of these

⁵ Other head and stem brassica vegetables approved for use with **TAPOUT** include: Chinese broccoli, Brussels sprouts, Chinese (napa) cabbage, Chinese mustard, cavalo broccolo and kohlrabi.

⁶ Other Fruiting Vegetables (except tomato) approved for use with **TAPOUT** include: eggplant, groundcherry, pepino, peppers (all) and tomatillo.

⁷ Other Herb crops approved for use with **TAPOUT** include: angelica, balm, basil, borage, burnet, camomile, catnip, chervil (dried), chive, Chinese chive, clary, coriander (leaf), costmary, culantro (leaf), curry (leaf), dill (dillweed), horehound, hyssop, lavender, lovage (leaf), marigold, marjoram (*Origanum* spp.), nasturtium, parsley (dried), pennyroyal, rosemary, rue, sage and savory, summer and winter.

⁸ Other root vegetables approved for use with **TAPOUT** include: burdock, edible; celeriac; chervil; turnip-rooted; chicory; ginseng; parsley, turnip-rooted; parsnip; radish, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret and turnip.

⁹ Other Edible Podded Legume Vegetable crops approved for use with **TAPOUT** include: Bean (*Phaseolus* spp.), runner, snap and wax; Bean (*Vigna* spp.), asparagus, Chinese longbean, moth, yardlong, jackbean; Pea (*Pisum* spp.), dwarf, edible-pod, snow, sugar snap, pigeon and sword bean.

¹⁰ Other Leafy Greens crops approved for use with **TAPOUT** include: amaranth (Chinese spinach, leafy amaranth and tampala), arugula (roquette), chervil, chrysanthemum (edible-leaved and garland), corn salad, cress (garden, yellow rock and winter), dandelion, dock (sorrel), endive (escarole), lettuce (head and leaf), orach, parsley, purslane (garden and winter), radicchio (red chicory), spinach, spinach (New Zealand and Vine (Indian and Malabar)).

¹¹ Other cucurbit crops approved for use with **TAPOUT** include: Chayote (fruit), Chinese Wax Gourd, Citron Melon, Edible Gourd, Gherkin and Muskmelons (all) including Honeydew Melon.

¹² Other leafy brassica greens approved for use with **TAPOUT** include: broccoli raab, Chinese (bok choy) cabbage, collards, kale, mizuna, mustard greens, mustard spinach, rape greens.

¹³ Other leaf petiole crops approved for use with **TAPOUT** include: cardoon, celtuce, Chinese celery, Florence fennel, and Swiss chard.

¹⁴ Other tuber and corm vegetables approved for use with **TAPOUT** include: arracacha, arrowroot, Chinese artichoke, Jerusalem artichoke, edible canna, bitter and sweet cassava, chayote (root), chufa, dasheen (taro), ginger, leren, tanier, turmeric; yam, bean and yam, true.

TAPOUT is a selective postemergence herbicide for control of annual and perennial grasses. **TAPOUT** does not control sedges or broadleaf weeds.

Control Symptoms

Treated grass weeds show a reduction in vigor and growth. Early chlorosis/necrosis of younger plant tissue is followed by a progressive collapse of the remaining foliage. Symptoms will generally be observed in 7 to 14 days after application, depending on grass species treated and environmental conditions.

APPLICATION INFORMATION

Timing of Applications

Apply **TAPOUT** postemergence to actively growing grasses according to rate table recommendations. Applications made to grass plants stressed by insufficient moisture, hot or cold temperatures, or to grass plants exceeding specified growth stages may result in unsatisfactory control. **DO NOT** apply under these conditions.

In arid regions where irrigation is used to supplement limited rainfall, **TAPOUT** should be applied, as soon as possible, after irrigation (within 7 days). In arid regions, a second application of **TAPOUT** will generally provide more effective control of perennial grass weeds than a single application. Make second application to actively growing grass 2 to 3 weeks after emergence of new growth.

Cultivation of treated grasses 7 days prior to or within 7 days after application of **TAPOUT** may reduce weed control.

Ground Application

Use of sufficient spray volumes and pressure is essential to ensure complete coverage. Use a minimum of 5 gals. and a maximum of 40 gals of spray solution per acre. Under the following conditions a minimum of 10 gals. per acre is required: ultra narrow row cotton, narrow row soybeans, broadleaf herbicide tank mixes, perennial grasses, volunteer corn, drought or stress conditions, heavy grass pressure or when grasses are at or near maximum height. Failure to use a minimum of 10 gals per acre under these conditions can result in poor coverage and reduced grass control requiring repeat applications. Spray pressures should reflect a minimum of 30 psi and a maximum of 60 psi at the nozzle. **DO NOT** use flood nozzles.

Applications to garlic, onions (dry bulb and green) or shallots (dry bulb and green) should be made in a minimum of 20 gals of spray solution per acre.

Air Application

Use a minimum of 3 gals of spray solution per acre unless otherwise directed in this label. Increase spray volumes up to 10 gals as grass or crop foliage becomes dense. For garlic, onions (dry bulbs and green) or shallots (dry bulb and green): When applying by air **DO NOT** exceed 16 fl oz/A in a single application. In California, air applications to garlic, onion or shallot should be made in a minimum of 20 gals of spray solution per acre. In states other than California, air application to garlic, onion or shallot should be made in a minimum of 10 gals of spray solution.

NOTE: Crop injury may occur when TAPOUT is applied to garlic, onion or shallot with aerial equipment.

Spot Treatment

When using hand sprayers or high volume sprayers utilizing hand guns, mix 1/3 to 2/3% (0.44 oz. to 0.85 oz. per gal.) **TAPOUT** and treat to wet vegetation, while not allowing runoff of spray solution. For uses requiring crop oil concentrate; include crop oil concentrate at 1% (1.3 oz. per gal.) by volume. For uses requiring nonionic surfactant, include non-ionic surfactant at 1/4% (0.33 oz. per gal.) by volume.

NOTE: If TAPOUT is applied as a spot treatment care should be taken to not exceed the maximum rate allowed on a "per acre" basis or crop injury may occur.

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.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- 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. For all other ground applications, the nozzle must be no more than 3 feet from the target vegetation.
- Applicators are required to use a medium or coarser droplet size (ASABE S572. 1).
- **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 manufacturer's recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT- Ground Boom

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.

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."

WEED RESISTANCE MANAGEMENT

For resistance management, TAPOUT is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to TAPOUT and other Group 1 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."

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

- Rotate the use of TAPOUT or other Group 1 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of

resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes. For further information or to report suspected resistance, contact Helena Agri-Enterprises, LLC at 901-761-0050 or at www.helenaagri.com
- 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.
- Fields should be scouted after application to verify that the treatment was effective.
- 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.
- Report any incidence of non-performance of this product against a particular weed species to your Helena Agri-Enterprises, LLC retailer, representative or call 901-761-0050. 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.
- Plant into weed-free fields and keep fields as weed-free as possible.
- To the extent possible, use a diversified approach toward weed management. Whenever possible incorporate multiple weed-control practices such as mechanical cultivation, biological management practices, and crop rotation.
- Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- To the extent possible **DO NOT** allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and post-harvest to prevent a buildup of the weed seed bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.
- Use a broad spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed-control program. **DO NOT** use more than two applications of this or any other herbicide with the same mechanism of action within a single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control weeds.
- If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.
- 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. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of actions for each target weed.

- For additional information on the management of herbicide resistance, consult the Herbicide Resistance Action Committee (HRAC) “*Guideline to the Management of Herbicide Resistance*” found at the HRAC website <http://hracglobal.com/files/Management-of-Herbicide-Resistance.pdf>

CHEMIGATION — GARLIC AND ONIONS (Dry Bulb and Green) SPRINKLER IRRIGATION APPLICATION

DO NOT apply TAPOUT by chemigation in the states of Idaho, Montana, Oregon and Washington.

Apply **TAPOUT** at the high rate specified for annual grasses (32 fl. oz./A) when the grass height is at the high end of the range (application to larger grasses may not provide adequate control). Add a crop oil concentrate containing at least 15% emulsifier at 1 quart per acre or non-ionic surfactant with at least 80% active ingredient at 0.25% v/v of total spray solution.

Apply **TAPOUT** in 0.1 to 0.2 acre inch of water either at the end of a regular irrigation set or as a separate application not associated with a regular irrigation using the least amount of water that provides proper distribution and coverage. Application of more than label specified quantities of irrigation water per acre may result in decreased product performance by removing the chemical from the zone of effectiveness. Use a metering device to inject the **TAPOUT** into the irrigation water at a constant flow. Constant agitation must be maintained in the chemical supply tank during the entire period of herbicide application. Inject the product with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. Allow time for all lines to flush the herbicide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of remaining herbicide, a dye indicator may be injected into the lines to mark the end of the application period.

It is not recommended that **TAPOUT** be applied through an irrigation system connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Use Precautions

1. Apply this product only through irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, travelers, big gun, solid set or hand move. **DO NOT** apply this product through any other type of irrigation system.
2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from non-uniform distribution of treated water.
3. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
4. A person knowledgeable of chemigation system and responsible for its operation or under supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
5. The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
6. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
7. The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
8. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
9. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

10. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

RESTRICTIONS AND LIMITATIONS

ALL USES

- **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label-prescribed safety devices for public water supplies are in place.
- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.
- **DO NOT** apply if rain is expected within 1 hour of application, as control may be unsatisfactory.
- **DO NOT** plant rotational crops until 30 days after application of **TAPOUT** unless crop is listed on **TAPOUT** label.
- **DO NOT** apply a postemergence broadleaf herbicide within one day following application of **TAPOUT** or reduced grass control may result.
- **TAPOUT** is not recommended for use on vegetable crops being grown for seed production unless specific use directions are provided.
- **DO NOT** apply under conditions of stress. Applying **TAPOUT** under conditions that **DO NOT** promote active grass growth will reduce herbicide effectiveness. These conditions include drought, excessive water, extremes in temperature, low humidity and grasses either partially controlled or stunted from prior pesticide applications. Grasses under these kinds of stressful conditions will not absorb and translocate **TAPOUT** effectively, and will be less susceptible to herbicide activity.
- Application on Long Island, New York, is restricted to no more than 32 fl oz of **TAPOUT** (0.25 lb a.i) per acre per year
- Maximum annual application rate is 1.04 lbs. a.i./A
- Aerial applications for all tree fruits and tree nuts uses are prohibited.

The use of this product may pose a hazard to the federally designated endangered species of Solano Grass and Wild Rice. Use of this product is prohibited in the following areas where the species are known to exist:

Solano Grass: Solano County, California: the vernal lakes area bounded by the Union Pacific Railroad and Hastings Road to the north, Highway 113 to the east, Highway 12 to the south and Travis Air Force Base to the west.

Wild Rice: Hays County, Texas.

Optimal perennial grass control can be obtained if rhizomes or stolons are cut up by preplant tillage practices (disking, plowing, etc.) to stimulate maximum emergence of grass shoots. Cultural practices, such as continuous no-tillage in which the perennial grass rhizomes or stolons are not cut up, results in a very staggered, non-uniform weed emergence. Due to this non-uniform weed emergence, no fewer than two **TAPOUT** applications per season per year are recommended at the appropriate weed-growth stage rate under continuous no-till conditions.

Grass crops such as corn, rice, small grains, sorghum or turf, etc. are highly sensitive to **TAPOUT**.

While all the vegetable crops on this label have been tested and are tolerant to **TAPOUT**, not all specialty varieties of these crops have been tested. It is advised that, before applying **TAPOUT** to specialty varieties of vegetable crops on this label, crop tolerance be investigated first using a small section of the field. It is possible that injury symptoms can occur. Symptoms may appear as leaf speckling or stunting.

Always read and follow the restrictions and limitations for all products whether used alone or in a tank mix. The most restrictive labeling of any product used applies in tank mixtures, including all crop rotation and other crop restrictions.

Tank mixes of **TAPOUT** and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs, an additional application of **TAPOUT** may be necessary.

Table 1. CROP SPECIFIC USE DIRECTIONS, RESTRICTIONS AND LIMITATIONS FOR TAPOUT

Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Alfalfa, Seedling	15 days before grazing, feeding or harvesting (cutting) for forage or hay	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v or COC/MSO at 1 qt/A Or 1% v/v See tank mix label for specific adjuvant recommendations.	2.5 to 4 lbs/A	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 32 fl oz/A (0.242 lb. a.i./A) per application. Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A) Maximum number of applications is 4.
Alfalfa, Established including: Sainfoin, Holy clover, Birdsfoot trefoil	15 days before grazing, feeding or harvesting (cutting) for forage or hay	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v or COC/MSO at 1 qt/A or 1% v/v See tank mix label for specific adjuvant recommendations.	2.5 to 4 lbs/A	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 32 fl oz/A (0.242 lb. a.i.) per application. Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A) Maximum number of applications is 4.
Artichoke (Globe)	5 days	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 16 fl oz/A (0.121 lb. a.i./A) in a single application DO NOT apply more than 62 fl oz/A (0.5 lb a.i./A) per year. Maximum number of applications is 4.

Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Asparagus	1 day	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 16 fl oz/A(0.121 lb. a.i./A) in a single application, Maximum annual application rate is 62 fl. oz. of product per acre (0.5 lb. a.i./A) Maximum number of applications is 4.
Bean, Dry including: Bean (<i>Lupinus</i> spp.) Grain Sweet White White Sweet Bean (<i>Phaseolus</i> spp.) Field Kidney Lima (dry) Navy Pinto Tepary Bean (<i>Vigna</i> spp.) Adzuki Bean Black-eyed Pea Catjang Cowpea Crowder Pea Moth Bean Mung Bean Rice Bean Southern Pea Urd Bean Broad (dry) Chickpea (garbanzo) Guar Lablab Bean Lentil	30 days	9 to 16 fl oz ⁽⁵⁾ (0.068 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v	None	DO NOT apply more than 32 fl oz/A (0.242 lb. a.i./A) per application. Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A) Maximum number of applications is 4. For repeat applications make on a minimum of a 14 day interval.

Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Bean, Succulent Shelled including: Bean (<i>Phaseolus</i> spp.) Broad Bean (succulent) Lima Bean (green) Bean (<i>Vigna</i> spp.) Black-eyed Pea Cowpea Southern Pea	21 days	9 to 16 fl oz ⁽⁵⁾ (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	DO NOT apply more than 16 fl oz/A (0.121 lb ai/A) per application. DO NOT apply more than 1 application per acre per year. For Annual and Perennial Grasses: DO NOT make more than 1 application at 16 fl oz/A (0.121 lb ai/A) per year. For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 2 applications at 8 fl oz/A (0.068 lb ai/A) per year..

Beet, Garden	30 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 16 fl. oz/A (0.121 lb. a.i./A) in a single application. DO NOT apply more than 62 fl oz/A (0.5 lb ai/A) per year. Maximum number of applications is 4.
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Brassica Vegetables, Head and Stem ⁽⁶⁾ including: Broccoli Cabbage Cauliflower Brussels sprouts	30 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	For repeat applications make on a minimum of a 14 day interval DO NOT apply more than 16 fl oz/A (0.121 lb. a.i./A) in a single application. DO NOT apply more than 62 fl oz/A (0.5 lb a.i./A) per year Maximum number of applications is 4.
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ <small>(Use a CPDA Certified adjuvant when possible)</small>	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Bushberry Including: Aronia Berry Blueberry, Highbush Chilean Guava Cranberry, Highbush Currant, Black Currant, Buffalo Currant, Native Currant, Red Elderberry European Barberry Gooseberry Honeysuckle Edible Huckleberry Jostaberry Juneberry, Saskatoon Berry Salal Sea Buckthorn Cultivars, varieties and/or hybrids of these	14 days	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 16 fl. oz./A (0.121 lb. a.i.) in a single application. DO NOT apply more than 62 fl. oz./A (0.5 lb ai/A) per year . Maximum number of applications is 4. Apply TAPOUT® postemergence to actively growing grasses according to rate table. Crop injury to bushberry can occur if TAPOUT® is improperly applied. TAPOUT® should not be applied directly over the top of these plant types. Instead spray should be directed at the base of the plant where grassy weeds are growing near the ground. DO NOT apply TAPOUT® to Bushberry grown for root stock. Non-bearing fruit crops are plants which will not bear fruit or nuts for at least one year following TAPOUT® application.

Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ <small>(Use a CPDA Certified adjuvant when possible)</small>	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Caneberry Including: Blackberry Loganberry Raspberry, Black Raspberry, Red Raspberry, Wild Cultivars, varieties and/or hybrids of these	7 days	9 to 16 fl. Oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. Oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	<p>For repeat applications make on a minimum of a 14 day interval.</p> <p>DO NOT apply more than 16 fl. Oz./A (0.121 lb. a.i./A) in a single application.</p> <p>DO NOT apply more than 62 fl. Oz./A (0.5 lb ai/A) per year .</p> <p>Maximum number of applications is 4.</p> <p>Apply TAPOUT® postemergence to actively growing grasses according to rate table.</p> <p>Crop injury to caneberry can occur if TAPOUT® is improperly applied. TAPOUT® should not be applied directly over the top of these plant types. Instead spray should be directed at the base of the plant where grassy weeds are growing near the ground.</p> <p>DO NOT apply TAPOUT® to Caneberry grown for root stock.</p> <p>Non-bearing fruit crops are plants which will not bear fruit or nuts for at least one year following TAPOUT® application.</p>
Canola (Not for use in California)	70 days	9 to 12 fl oz ⁽⁵⁾ (0.068 to 0.121 lb. a.i.)	12 ft. oz. (0.091 lb. a.i.)	NIS at 0.25% v/v Use a CPDA Certified adjuvant when possible)	None	<p>DO NOT apply after crop has begun bolting. Crop injury may occur when TAPOUT is applied during the bloom period.</p> <p>DO NOT apply more than 12 fl oz/A (0.091 lb. a.i./A) in a single application.</p> <p>Maximum annual application rate is 12 fl. oz. of product per acre (0.1 lbs. a.i./A)</p> <p>Maximum number of applications is 1.</p>

Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Carrot	30 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v Use a CPDA Certified adjuvant when possible)	None	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 16 fl oz/A (0.121 lb. a.i./A) in a single application. Maximum annual application rate is 64 fl. oz. of product per acre (0.5 lbs. a.i./A) Maximum number of applications is 4.

Clover	15 days before grazing, feeding or harvesting (cutting) for forage or hay	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v Use a CPDA Certified adjuvant when possible)	2.5 to 4 lbs/A	For use on clover grown in the states of Idaho, Oregon and Washington only. For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 32 fl. oz./A (0.242 lb. a.i./A) in a single application. Maximum annual application rate is 32 fl. oz. of product per acre (0.242 lbs. a.i./A) For Annual Grasses: DO NOT make more than 2 applications at 16 fl oz/A (0.121 lb ai/A) per year. For Perennial Grasses: DO NOT make more than 1 application at 32 fl oz/A (0.242 lb ai/A) per year.
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ <small>(Use a CPDA Certified adjuvant when possible)</small>	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Cotton	60 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v or COC/MSO at 1 qt/A or 1% v/v See tank mix label for specific adjuvant recommendations	2.5 to 4 lbs/A	<p>DO NOT graze treated fields or feed treated forage or hay to livestock.</p> <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>DO NOT apply more than 32 fl oz (0.242 lb. a.i./A) /A in a single application.</p> <p>Maximum annual application rate is 64 fl. oz. of product per acre (0.5 lbs. a.i./A)</p> <p>Maximum number of applications is 4.</p>

Cranberry	30 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	<p>For repeat applications make on a minimum of a 14 day interval.</p> <p>DO NOT apply more than 16 fl oz/A (0.121 lb. a.i./A) in a single application.</p> <p>Maximum annual application rate is 64 fl. oz. of product per acre (0.5 lbs. a.i./A)</p> <p>Maximum number of applications is 4.</p> <p>DO NOT apply between the “hook” stage and full fruit set.</p>
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Cucurbits including: Cantaloupes (all) Cucumber Gherkin Honeydew Melon Muskmelons (all) Pumpkin Squash (all) Watermelon	14 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	DO NOT make applications less than 14 days apart. DO NOT apply more than 16 fl oz/A (0.121 lb. a.i./A) in a single application. Maximum annual application rate is 64 fl. oz. of product per acre (0.5 lbs. a.i./A) Maximum number of applications is 4.

Fallow Land Conifer Trees (and other non-producing agricultural areas) Non-Crop or Non-Planted Areas	N/A	9 to 16 fl oz. (0.068 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v or COC/MSO at 1 qt./A or 1% v/v	2.5 to 4 lbs./A	DO NOT make applications less than 14 days apart. DO NOT plant any crop for 30 days after application unless Clethodim is registered for use in that crop. DO NOT apply more than 32 fl oz/A (0.242 lb. a.i./A) per application. Maximum annual application rate is 64 fl. oz. of product per acre (0.5 lbs. a.i./A) Maximum number of applications is 4.
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Field Corn ⁽⁵⁾ (Not for use in California and New York)	90 days	6 fl. oz. (0.045 lb. a.i.)	-	NIS at 0.25% v/v plus AMS DO NOT use COC or MSO with TAPOUT in this use pattern	2.5 to 4 lbs/A	DO NOT make more than 1 application per year. DO NOT apply more than 6 oz/A (0.045 lb. a.i.) per year. To control existing stand, replant no sooner than 6 days after application.

Flax (Not for use in California)	60 days	9 to 16 fl. oz. ⁽⁵⁾ (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	Apply prior to bloom. Crop injury may occur when TAPOUT is applied during the bloom period. For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 16 fl. oz./A (0.121 lb. a.i./A) per application. DO NOT apply more than 32 fl. oz. (0.242 lb. a.i./A) in a year. Maximum number of applications is 2.
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Fruiting Vegetable (except Tomato) including: Eggplant Groundcherry Pepino Peppers (all) Tomatillo	20 days	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	DO NOT make applications less than 14 days apart. DO NOT apply more than 16 fl. oz/A (0.121 lb. a.i./A) in a single application. Maximum annual application rate is 64 fl. oz. of product per acre (0.5 lbs. a.i./A) Maximum number of applications is 4.
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Herbs including: Angelica Balm Basil Borage Burnet Chamomile Catnip Chervil (dried) Chive Chive, Chinese Clary Coriander (leaf) Costmary Cilantro (leaf) Curry (leaf) Dill (dillweed) Horehound Hyssop Lavender Lovage (leaf) Marigold Marjoram (<i>Origanum</i> spp.) Nasturtium Parsley (dried) Pennyroyal Rosemary Rue Sage Savory, Summer and Winter Sweet Bay Tansy Tarragon Thyme Wintergreen Woodruff Wormwood	14 days	9 to 16 fl oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	<p>TAPOUT has not been tested on all herbs, and herb varieties. It is the responsibility of the user to test TAPOUT on a small portion of the crop to be treated before treating the entire field.</p> <p>Crop tolerance should be verified to TAPOUT on a small area of the herb crop, at the desired TAPOUT rate and with the same crop oil concentrate that will be used on the herb field. If no crop response is evident seven (7) days after treatment, TAPOUT may be used on the entire field at the rate tested and with the same crop oil used in the tolerance test.</p> <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>DO NOT apply more than 16 fl. oz./A (0.121 lb. a.i./A) in a single application.</p> <p>DO NOT apply more than 64 fl. oz./A (0.485 lb. a.i./A) per year .</p> <p>Maximum number of applications is 4.</p>

Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ <small>(Use a CPDA Certified adjuvant when possible)</small>	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Hops	21 days	9 to 16 fl oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	For repeat application make on a minimum of a 14 day interval. DO NOT apply more than 16 fl. oz/A (0.121 lb. a.i./A) in a single application. DO NOT apply more than 64 fl. oz/A (0.485 lb. a.i/A) per year. Maximum number of applications is 4.

Leaf Lettuce	14 days	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v <small>(Use a CPDA Certified adjuvant when possible)</small>	None	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 16 fl. oz/A (0.121 lb. a.i./A) in a single application. DO NOT apply more than 64 fl oz/A (0.485 lb. al/A) per year. Maximum number of applications is 4.
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Leafy Brassica Greens, including: Broccoli Raab Cabbage, Chinese (bok choy) Collards Kale. Mizuna Mustard Greens Mustard Spinach Rape Greens	14 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	For repeat application make on a minimum of a 14 day interval. DO NOT apply more than 16 fl oz./A (0.121 lb. a.i./A) in a single application. DO NOT apply more than 64 fl. oz./A (0.485 lb. a.i/A) per year . Maximum number of applications is 4.
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Leaf Petioles including: Cardoon Celery Celtuce Chinese Celery Fennel, Florence (finocchio) Rhubarb Swiss Chard	30 days	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	DO NOT make applications less than 14 days apart. DO NOT apply more than 16 fl. oz/A (0.121 lb. a.i./A) in a single application. Maximum annual application rate is 64 fl. oz. of product per acre (0.485 lbs. a.i./A). Maximum number of applications is 4.

Leafy Greens including: Amaranth, Chinese Amaranth, Leafy Tampala Arugula (roquette) Chervil Chrysanthemum, Edible-leaved Chrysanthemum, Garland Corn Salad Cress Garden Upland (yellow rock and winter) Dandelion Dock (sorrel) Endive (escarole) Lettuce, Head and Leaf Orach Parsley Purslane Garden Winter Radicchio (red chicory) Spinach Spinach, New Zealand Vine (Indian and Malabar)	14 days	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	DO NOT make applications less than 14 days apart. DO NOT apply more than 16 fl. oz./A (0.121 lb. a.i./A) in a single application. Maximum annual application rate is 64 fl. oz. of product per acre (0.485 lbs. a.i./A). Maximum number of applications is 4.
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Legume Vegetables, Edible Podded including: Bean (<i>Phaseolus</i> spp.) Runner Snap Wax Bean (<i>Vigna</i> spp.) Asparagus Chinese Longbean Moth Yardlong Jackbean Pea (<i>Pisum</i> spp.) Dwarf Edible-pod Snow Sugar Snap Pigeon Sword Bean	21 days	9 to 16 fl oz ⁽⁵⁾ (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	For peas apply before bloom, but no later than 21 days before harvest. DO NOT apply more than 16 fl oz/A (0.121 lb. a.i./A) in a single application. DO NOT apply more than one (1) application per acre per year. DO NOT apply more than 0.121 lb ai/A per year.

Mint	21 days	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 32 fl. oz. (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v or COC/MSO at 1 qt./A or 1%v/v	2.5 to 4 lbs./A	DO NOT make applications less than 14 days apart. DO NOT apply more than 32 fl. oz./A (0.242 lb. a.i./A) in a single application. Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A). Maximum number of applications is 4.
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Mustard Seed (Not for use in California)	75 days	9 to 12 fl. oz. ⁽⁵⁾ (0.068 to 0.091 lb. a.i.)	12 fl. oz. (0.091 lb. a.i.)	NIS at 0.25% v/v	None	<p>DO NOT apply more than 12 fl oz/A (0.091 lb ai/A) per year.</p> <p>For Annual and Perennial Grasses: DO NOT make more than 1 application at 12 fl oz/A (0.091 lb ai/A) per year.</p> <p>For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 1 application at 8 fl oz/A (0.061 lb ai/A) per year.</p> <p>DO NOT apply after crop has begun bolting. Crop injury may occur when TAPOUT is applied during the bloom period.</p>

Onions (Dry Bulbs Only)^(7,8) Garlic^(7,8) Shallots (Dry Bulbs Only)^(7,8)	45 days	9 to 16 fl oz. (0.068 to 0.121 lb. a.i.)	12 to 32 fl. oz. (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v	None	<p>DO NOT make applications less than 14 days apart.</p> <p>DO NOT apply more than 32 fl. oz./A (0.242 lb. a.i./A) in a single application.</p> <p>Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A)</p> <p>Maximum number of applications is 4.</p> <p>Minimum of 20 gals/A spray volume by ground in entire U.S.</p> <p>Minimum of 20 gals./A spray volume by air in California.</p> <p>In states other than California, air applications to onions, garlic or shallots should be made in a minimum of 10 gals/A.</p>
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Onions, Green ^(7,8) including: Leeks Scallions or Spring Onions Japanese Bunching Onions Green Shallots Green Eschalots (Not for use in California)	14 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	DO NOT make applications less than 14 days apart. DO NOT apply more than 16 fl. oz./A (0.121 lb. a.i./A) in a single application. Maximum annual application rate is 64 fl. oz. of product per acre (0.5 lbs. a.i./A). Maximum number of applications is 4. Air applications to onions, garlic or shallots should be made in a minimum of 10 gals/A. ⁽⁷⁾

Ornamentals	N/A	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 32 fl. oz. (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v	None	DO NOT make applications less than 14 days apart. Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A)
Non-Bearing Food Crops ⁽⁷⁾	N/A	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)			Maximum number of applications is 4. Sugar maples cannot be tapped for syrup within one year of TAPOUT application. DO NOT apply more than 16 fl oz./A in a single application to non-bearing food crops.

Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Pea, Shelled <i>(Pisum spp.)</i> Field Pigeon	30 days	9 to 16 fl oz ⁽⁵⁾ (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	<p>DO NOT apply more than 16 fl. oz./A (0.121 lb. a.i./A) per application.</p> <p>DO NOT apply more than one (1) application per acre per year .</p> <p>Apply before bloom but not later than 30 days prior to harvest.⁽⁹⁾</p>

Pea, Succulent Shelled <i>(Pisum spp.)</i> English Pea Garden Pea Green Pea Pigeon Pea	21 days	9 to 16 fl oz ⁽⁵⁾ (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	<p>DO NOT apply more than 16 fl oz./A(0.121 lb. a.i./A) per application.</p> <p>DO NOT apply more than one (1) application per acre per year .</p> <p>Apply before bloom but not later than 21 days prior to harvest.⁽⁹⁾</p>
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Peach	14 days	9 to 16 fl. Oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. Oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	<p>DO NOT make applications less than 14 days apart.</p> <p>DO NOT apply more than 16 fl. oz./A (0.121 lb. a.i./A) in a single application.</p> <p>Maximum annual application rate is 64 fl. oz. of product per acre (0.5 lbs. a.i./A).</p> <p>Maximum number of applications is 4.</p> <p>Crop injury to peach can occur if TAPOUT[®] is improperly applied. TAPOUT[®] should not be applied directly over the top of these plant types. Instead spray should be directed at the base of the plant where grassy weeds are growing near the ground.</p> <p>DO NOT apply TAPOUT[®] to Peach grown for root stock.</p> <p>Non-bearing fruit crops are plants which will not bear fruit or nuts for at least one year following TAPOUT[®] application.</p>

Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Peanut (including perennial)	40days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v or COC/MSO at 1 qt/A or 1% v/v	2.5 to 4 lbs/A	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 32 fl oz/A (0.242 lb. a.i./A) in a single application. Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A) Maximum number of applications is 4.

Potato	30 days	9 to 16 fl. oz (0.068 to 0.121 lb. a.i.)	12 to 32 fl. oz. (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v or COC/MSO at 1 qt./A or 1%v/v	2.5 to 4 lbs./A	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 32 fl oz./A (0.242 lb. a.i./A) in a single application. Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A). Maximum number of applications is 4.
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ <small>(Use a CPDA Certified adjuvant when possible)</small>	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Radish	15 days	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25%v/v	None	<p>DO NOT make applications less than 14 days apart.</p> <p>DO NOT apply more than 16 fl. oz./A (0.121 lb. a.i./A) in a single application.</p> <p>DO NOT apply more than 32 fl. oz./A (0.25 lb. ai) per acre in a season.</p> <p>DO NOT make more than 2 applications per acre per year.</p>

Root Vegetables (except radish) ⁽¹⁰⁾	30 days	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	<p>DO NOT apply more than 16 fl. oz./A (0.121 lb. a.i./A) in a single application.</p> <p>DO NOT apply more than 64 fl. oz./A (0.5 lb. al/A) per year .</p> <p>For repeat applications make on a minimum of a 14 day interval.</p>
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Safflower	70 days	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	<p>For repeat applications make on a minimum of a 14 day interval.</p> <p>DO NOT apply more than 16 fl oz/A (0.121 lb. a.i./A) in a single application.</p> <p>DO NOT apply more than 64 fl oz/A (0.5 lb al/A) per year.</p> <p>Maximum number of applications is 4</p>
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Sesame	14 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	<p>DO NOT apply during flowering.</p> <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>DO NOT apply more than 16 fl oz/A (0.121 lb. a.i./A) in a single application.</p> <p>DO NOT apply more than 64 fl oz/A (0.5 lb aI/A) per year.</p> <p>Maximum number of applications is 4</p>
Soybean	60 days	9 to 16 fl oz ⁽⁵⁾ (0.068 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	<p>NIS at 0.25% v/v or COC/MSO at 1 qt/A or 1% v/v</p> <p>See tank mix label for specific adjuvant recommendations.</p>	2.5 to 4 lbs/A	<p>For repeat applications make on a minimum of a 14 day interval.</p> <p>DO NOT apply more than 32 fl oz/A (0.242 lb. a.i./A) per application.</p> <p>Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A).</p> <p>Maximum number of applications is 4.</p> <p>DO NOT graze treated fields or feed treated forage or hay to livestock.</p>
Strawberry	4 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 16 fl oz (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	<p>For repeat applications make on a minimum of a 14 day interval.</p> <p>DO NOT apply more than 16 fl oz/A (0.121 lb. a.i./A) in a single application.</p> <p>DO NOT apply more than 64 fl oz/A (0.5 lb aI/A) per year.</p> <p>Maximum number of applications is 4.</p>

Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Sugar Beet	40 days	9 to 16 fl oz ⁽⁵⁾ (0.068 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v or COC/MSO at 1 qt/A or 1% v/v See tank mix label for specific adjuvant recommendations.	2.5 to 4 lbs/A	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 32 fl oz/A (0.242 lb. a.i./A) per application. Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A). Maximum number of applications is 4.

Sunflower	70 days	9 to 16 fl oz ⁽⁵⁾ (0.068 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v or COC/MSO at 1 qt/A or 1% v/v See tank mix label for specific adjuvant recommendations.	2.5 to 4 lbs/A	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 32 fl. oz/A (0.242 lb. a.i./A) per application. Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A). Maximum number of applications is 4.
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ (Use a CPDA Certified adjuvant when possible)	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Sweet Potato, Yam and other tuberous and corm vegetables (except potato) ⁽¹²⁾	30 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v	None	For repeat applications make on a minimum of a 14 day interval. DO NOT apply more than 32 fl oz/A (0.242 lb. a.i./A) per application. Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A). Maximum number of applications is 4.

Tomato	20 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 32 fl oz (0.091 to 0.242 lb. a.i.)	NIS at 0.25% v/v	None	DO NOT make applications less than 14 days apart DO NOT apply more than 32 fl oz/A (0.242 lb. a.i./A) per application. Maximum annual application rate is 129 fl. oz. of product per acre (1.04 lbs. a.i./A). Maximum number of applications is 4.
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Crop ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre ⁽²⁾	Perennial Grass Use Rate Per Acre ⁽²⁾	Adjuvant Recommendation ⁽³⁾ <small>(Use a CPDA Certified adjuvant when possible)</small>	Ammonium Sulfate Recommendation ⁽⁴⁾	Special Use Instructions And Restrictions
Turnip Greens	14 days	9 to 16 fl oz (0.068 to 0.121 lb. a.i.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	NIS at 0.25% v/v	None	For repeat application make on a minimum of a 14 day interval. DO NOT apply more than 16 fl. oz. /A (0.121 lb. a.i./A) in a single application. DO NOT apply more than 64 fl. oz. /A (0.5 lb. al/A) per year. Maximum number of applications is 4.

N/A = Not Applicable

1. **TAPOUT** is not specified for use on vegetable crops being grown for seed production unless specific use directions are provided.
2. See annual and perennial grass control tables for specific use rate recommendations.
3. Non-ionic surfactant (NIS) in this case refers to an adjuvant containing at least 80% non-ionic surfactant. Crop oil concentrate in this case refers to both crop oil concentrate and crop oil concentrate blends. Acceptable crop oil concentrates would be those that contain a minimum of 80% oils and 15% emulsifier. Acceptable crop oil concentrate blends would be those that contain a minimum of 60% oils and 25-40% surfactants and emulsifiers. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all the following criteria: be non-phytotoxic, contain only EPA-exempt ingredients, provide good mixing quality and be successful in local experience. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. **Use a CPDA Certified Adjuvant when possible.**
4. If Ammonium Sulfate is going to be used it must be spray grade ammonium sulfate. The use of ammonium sulfate or Ammonium Sulfate Replacement products does not take the place of the required adjuvant.
5. See DIRECTIONS FOR REDUCED RATE USE TO CONTROL SMALL ANNUAL GRASSES table.
6. Other head and stem brassica vegetables approved include: Chinese broccoli; Brussels sprouts; Chinese (napa) cabbage; Chinese mustard; cavalo broccolo; and kohlrabi.
7. If **TAPOUT** is applied as a spot treatment to garlic, onion, shallot or non-bearing food crops care should be taken to not exceed the maximum rate allowed on a "per acre" basis or crop injury may occur.
8. In California, **DO NOT** apply **TAPOUT** to garlic, onions or shallots until crop has at least two full leaves. In California, 14 days spray intervals are recommended between the application of **TAPOUT** and liquid nitrogen and other herbicide applications. Injury to crop may occur when shorter intervals are observed.
9. Applications of **TAPOUT** to peas during the bloom period could result in severe crop injury, including loss of yield and delayed maturity.
10. Other root vegetables approved for use with **TAPOUT** include: burdock, edible; celeriac; chervil, turnip-rooted; chicory; ginseng; parsley, turnip-rooted; parsnip; radish, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret and turnip.
11. See **TAPOUT TANK MIX WITH BROADLEAF HERBICIDES FOR THE CONTROL OF VOLUNTEER CORN (INCLUDING ROUNDUP READY®) IN SOYBEAN.**
12. Other tuber and corm vegetables approved for use with **TAPOUT** include: arracacha, arrowroot, Chinese artichoke, Jerusalem artichoke, edible canna, cassava, bitter and sweet chayote (root), chufa, dasheen (taro), ginger, leren, tariier, turmeric and bean yam.

**DIRECTIONS FOR ANNUAL GRASSES
ALL CROPS**

- Apply only to actively growing grasses at specified weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the specified growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

RESTRICTION

- **DO NOT** exceed the maximum per application rate listed in Table 1, CROP SPECIFIC USE DIRECTIONS, RESTRICTIONS AND LIMITATIONS FOR TAPOUT

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT (inches)	APPLICATION RATES	
			MINIMUM RATE fl. oz./A (lb. a.i./A)	Maximum rate ⁽¹⁾ Fl. oz./A (lb. a.i./A)
Barnyardgrass	<i>Echinochloa crus-galli</i>	2 to 8	9 (0.068)	16 (0.121)
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	2 to 6	9 (0.068)	16 (0.121)
Brome				
California	<i>Bromus carinatus</i>	2 to 6	9 (0.068)	16 (0.121)
Cheat	<i>Bromus secalinus</i>	2 to 6	9 (0.068)	16 (0.121)
Downy	<i>Bromus tectorum</i>	2 to 6	9 (0.068)	16 (0.121)
Ripgut	<i>Bromus diandrus</i>	2 to 6	9 (0.068)	16 (0.121)
Canarygrass	<i>Phalaris canariensis</i>	1 to 4	9 (0.068)	16 (0.121)
Crabgrass				
Hairy	<i>Digitaria adscendens</i>	2 to 6**	9 (0.068)	16 (0.121)
Large	<i>Digitaria sanguinalis</i>	2 to 6**	9 (0.068)	16 (0.121)
Smooth	<i>Digitaria ischaemum</i>	2 to 6**	9 (0.068)	16 (0.121)
Southern	<i>Digitaria ciliaris</i>	2 to 6**	9 (0.068)	16 (0.121)
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	2 to 6**	9 (0.068)	16 (0.121)
Fall Panicum	<i>Panicum dichotomiflor</i>	2 to 8	9 (0.068)	16 (0.121)
Field Sandbur	<i>Cenchrus incertus</i>	2 to 6	9 (0.068)	16 (0.121)
Foxtail				
Giant	<i>Setaria faberi</i>	2 to 12	9 (0.068)	16 (0.121)
Green	<i>Setaria viridis</i>	2 to 8	9 (0.068)	16 (0.121)
Yellow	<i>Setaria glauca</i>	2 to 8	9 (0.068)	16 (0.121)
Goosegrass	<i>Eleusine indica</i>	2 to 6**	9 (0.068)	16 (0.121)
Itchgrass	<i>Rottboellia cochinchinensis</i>	2 to 6	9 (0.068)	16 (0.121)
Junglerice	<i>Echinochloa colona</i>	2 to 6	9 (0.068)	16 (0.121)
Lovegrass (Stinkgrass)	<i>Eragrostis cilianensis</i>	2 to 6	9 (0.068)	16 (0.121)
Rabbitsfootgrass	<i>Polypogon monspeliensis</i>	1 to 4	9 (0.068)	16 (0.121)
Red Rice	<i>Oryza sativa</i>	1 to 3	9 (0.068)	16 (0.121)
Ryegrass				
Hardy	<i>Lolium remotum</i>	2 to 6	9 (0.068)	16 (0.121)
Italian*	<i>Lolium multiflorum</i>	2 to 6	9 (0.068)	16 (0.121)
Seedling Johnsongrass*	<i>Sorghum halepense</i>	4 to 10	9 (0.068)	16 (0.121)
Shattercane	<i>Sorghum bicolor</i>	6 to 18	9 (0.068)	16 (0.121)
Southwestern Cupgrass	<i>Eriochloa gracilis</i>	2 to 6	9 (0.068)	16 (0.121)
Sprangletop		2 to 6	9 (0.068)	16 (0.121)
Amazon	<i>Leptochloa panicoides</i>			
Bearded	<i>Leptochloa fascicularis</i>	2 to 6	9 (0.068)	16 (0.121)
Mexican	<i>Leptochloa uninervia</i>	2 to 6	9 (0.068)	16 (0.121)
Red	<i>Leptochloa filiformis</i>	2 to 6	9 (0.068)	16 (0.121)
Texas Panicum	<i>Panicum texanum</i>	2 to 6	9 (0.068)	16 (0.121)
Volunteer Cereals ⁽³⁾		2 to 6	9 (0.068)	16 (0.121)
Barley	<i>Hordeum vulgare</i>			
Oats	<i>Avena sativa</i>	2 to 6	9 (0.068)	16 (0.121)
Rye	<i>Secale cereale</i>	2 to 6	9 (0.068)	16 (0.121)
Wheat ⁽²⁾	<i>Triticum aestivum</i>	2 to 6	9 (0.068)	16 (0.121)
Volunteer Corn ^(2,3)	<i>Zea mays</i>	Up to 12	6 (0.045)	12 (0.091)
Volunteer Corn ⁽³⁾	<i>Zea mays</i>	Up to 24	9 (0.068)	14 (0.106)

Volunteer Corn ^(2,3)	<i>Zea mays</i>	Up to 36	12 (0.091)	16 (0.121)
Volunteer Grain Sorghum	<i>Sorghum bicolor</i>	8 to 12	9 (0.068)	16 (0.121)
Wild Oats	<i>Avena fatua</i>	2 to 6	9 (0.068)	16 (0.121)
Wild Proso Millet	<i>Panicum miliaceum</i>	2 to 10	9 (0.068)	16 (0.121)
Witchgrass	<i>Panicum capillare</i>	2 to 8	9 (0.068)	16 (0.121)
Wooly Cupgrass	<i>Erichhloa villosa</i>	2 to 8	9 (0.068)	16 (0.121)

*Generally occurs between 3-leaf stage and tillering.

**Length of lateral growth.

1.

Rates higher than 16 fl. oz./A (0.121 lb. a.i./A) may be applied in certain geographic areas, cropping situations or environmental conditions, where experience has shown that higher rates are needed for satisfactory control of annual grasses. In these situations, rates from 16 to 32 fl. oz./A (0.121 to 0.242 lb. a.i./A) may be applied. **DO NOT** apply more than 16 fl. oz./A (0.121 lb. a.i./A) of **TAPOUT** per application to the following crops: garden beets, broccoli, cabbage, carrot, cauliflower (and other head and stem brassica vegetables), celery, cranberry, cucurbits, flax, fruiting vegetables (except tomato), green onion, leaf lettuce, radish (and other root vegetables), rhubarb (and other leaf petioles), strawberry and non-bearing food crops. **DO NOT** apply more than 12 fl. oz./A (0.091 lb. a.i./A) of **TAPOUT** per application to canola or mustard seed.

- When a cereal grain crop (such as wheat) is interseeded for crop establishment or is planted as wind breaks to aid crop establishment, the minimum **TAPOUT** use rate for control is 12 fl. oz./A (0.091 lb. a.i./A).
- Includes Roundup Ready, Liberty Link® and IMI-CORN® volunteer corn; however not Sethoxydim-Resistant volunteer corn.

DIRECTIONS FOR ANNUAL & PERENNIAL GRASS CONTROL IN ESTABLISHED ALFALFA AND MINT WITH TAPOUT

GRASS SPECIES	WEED SPECIES AND SIZE	APPLICATION RATES
Annual & Perennial Grasses Listed in Grass Tables	See Tables	See Table 1, CROP SPECIFIC USE DIRECTIONS, RESTRICTIONS AND LIMITATIONS FOR TAPOUT

Mowing: The best control of annual grasses can be achieved by applying **TAPOUT** before grass weeds are mowed. Once a grass is mowed it becomes tougher to control, as much of the available leaf surface has been removed. In areas without a killing frost, some annuals can over-winter after having been mowed multiple times. These grasses form large crowns and may contain many viable buds. These grasses, even though they may be an annual grass, may require repeated applications of **TAPOUT** for partial or complete control.

Irrigated Alfalfa and Mint: Irrigation practices can be very critical to the successful use of **TAPOUT** in established alfalfa and mint and may be necessary to initiate active growth of the weeds prior to application. Generally applications 2 to 4 days after irrigation are most effective. Irrigation made shortly after application (2 days) can be effective, but more consistent grass control occurs when the irrigation is made before the application.

Aerial Application: Apply **TAPOUT** in a minimum of 10 GPA in established alfalfa and mint when applying by air.

Annual Grass Control: Apply **TAPOUT** at the grass sizes indicated in the Recommendation for Annual Grass Table and rates indicated. If a grass has been cut, apply **TAPOUT** after active growth has resumed and regrowth has reached the minimum height and before it reaches the maximum height indicated. Apply before the alfalfa/mint canopy covers the grasses and interferes with the spray coverage. Some annual grasses are spring- and summer- germinating plants, while others are fall-germinating plants, and the time they are actively growing and most susceptible to **TAPOUT** may vary from region to region. Also some annuals germinate over an extended period of time, and because control of small grasses is desired, applications after each weed flush may be required. As a general rule spray spring and summer germinating grasses as early in the season as possible, after initial green-up. Spray fall -germinating weeds in the fall soon after they begin growing but before any damage is done due to frost. Late fall applications may be less effective due to environmental conditions, such as frost, slower plant growth or the onset of flowering.

Perennial Grass Control: **TAPOUT** effectively controls perennial grasses such as bermudagrass, Johnsongrass, quackgrass, wirestem muhly, tall fescue, foxtail barley and orchardgrass. Due in part to lack of tillage, perennial grasses are more difficult to control in a perennial crop such as established alfalfa or mint. A program of repeated applications is usually necessary for best results. The best way to control perennial grasses is to do so in the year of stand establishment before rhizomes and stolons become large and difficult to kill.

Use the high rate under heavy grass pressure and/or when grasses are at or near maximum height.

DIRECTIONS FOR REDUCED RATE USE TO CONTROL SMALL ANNUAL GRASSES CANOLA, FLAX, LEGUME VEGETABLES (DRY AND SUCCULENT), MUSTARD SEED, SOYBEAN, SUGARBEET AND SUNFLOWER (REDUCED RATE RECOMMENDATIONS NOT FOR USE IN CALIFORNIA)

- Apply only to actively growing grasses at specified weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the specified growth stage for treatment.
- Regrowth by tillering may occur if application is made when plants are stressed by lack of moisture, excessive moisture, low or high temperatures and/or under very low humidity.

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT (inches)	RATE FL. OZ./ACRE⁽¹⁾ (lb. a.i./A)
Barnyardgrass	<i>Echinochloa crus-galli</i>	1 to 4	6 (0.045)
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	1 to 4	8 (0.061)
Crabgrass			
Large	<i>Digifaria san guinalis</i>	1 to 3*	6 (0.045)
Large	<i>Digitaria sanguinalis</i>	1 to 4*	8 (0.061)
Smooth	<i>Digitaria ischaemum</i>	1 to 3*	6 (0.045)
Smooth	<i>Digitana ischaemum</i>	1 to 4*	8 (0.061)
Southern	<i>Digitaria char</i>	1 to 4*	8 (0.061)
Fall Panicum	<i>Panicum dichotomiflorum</i>	1 to 4	6 (0.045)
Foxtail			
Giant	<i>Setarie faberi</i>	1 to 4	6 (0.045)
Green	<i>Setaria viridis</i>	1 to 4	6 (0.045)
Millet	<i>Setaria italica</i>	1 to 4	8 (0.061)
Yellow	<i>Setaria glauca</i>	1 to 4	6 (0.045)
Seedling Johnsongrass	<i>Sorghum halepense</i>	1 to 6	8 (0.061)
Shattercane	<i>Sorghum bicolor</i>	4 to 10	6 (0.045)
Texas Panicum	<i>Panicum texanum</i>	1 to 4	8 (0.068)
Volunteer Cereals			
Barley	<i>Hordeum vulgare</i>	1 to 4	8 (0.061)
Oats	<i>Avena sativa</i>	1 to 4	8 (0.061)
Wheat	<i>Triticum asetivum</i>	1 to 4	8 (0.061)
Volunteer Corn**	<i>Zea mays</i>	4 to 12	6 (0.045)
Wild Proso Millet	<i>Panicum miliaceum</i>	1 to 6	6 (0.045)
Wild Oats	<i>Avena fatua</i>	1 to 4	8 (0.061)

*Length of lateral growth.

**Not S.R. Corn

⁽¹⁾Always add a non-ionic surfactant at 0.25% v/v total spray volume unless crop specific restrictions and limitations advise otherwise.

DIRECTIONS FOR PERENNIAL GRASSES (ALL CROPS)

- Apply only to actively growing grasses at specified weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the specified growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.
- **DO NOT** exceed the maximum per application rate listed in Table 1, CROP SPECIFIC USE DIRECTIONS, RESTRICTIONS AND LIMITATIONS FOR **TAPOUT**.

GRASS SPECIES	WEED HEIGHT (inches)	APPLICATION RATE	
		MINIMUM RATE fl. oz./A (lb. a.i./A)	MAXIMUM RATE fl. oz./A (lb. a.i./A)
Bermudagrass (<i>Cynodon dactylon</i>) First Application	3 (or up to 6" runners)	12 (0.091)	32 (0.242)
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	12 (0.091)	32(0.242)
Fescue, Tall (<i>Festuca arundinacea</i>) First Application	4 to 8	12 (0.091)	32 (0.242)
Repeat Application(s) (if regrowth occurs)	4 to 8	12 (0.091)	32 (0.242)
Foxtail Barley (<i>Hordeum jubatum</i>) First Application	2 to 6	12 (0.091)	32 (0.242)
Repeat Application (if regrowth occurs)	2 to 6	12 (0.091)	32 (0.242)
Orchardgrass (<i>Dactylis glomerata</i>) First Application	4 to 8	12 (0.091)	32 (0.242)
Repeat Application(s) (if regrowth occurs)	4 to 8	12 (0.091)	32 (0.242)
Quackgrass (<i>Elytrigia repens</i>) First Application	4 to 12	12 (0.091)	32 (0.242)
Repeat Application(s) (if regrowth occurs)	4 to 12	12 (0.091)	32 (0.242)
Rhizome Johnsongrass (<i>Sorghum halepense</i>) First Application	12 to 24	12 (0.091)	32 (0.242)
Repeat Application(s) (if regrowth occurs)	6 to 18	9 (0.068)	24 (0.182)
Wirestem Muhly (<i>Muhlenbergia frondosa</i>) First Application	4 to 8	12 (0.091)	32 (0.242)
Repeat Applicatioh(s) (if regrowth occurs)	4 to 8	12 (0.091)	32 (0.242)
Perennial Bluegrass [Roughstalk (<i>Poa trivialis</i>)] [Kentucky (<i>Poa prantensis</i>)] First Application	2 to 4	12 (0.091)	32 (0.242)
Repeat Application(s)	2 to 4	12 (0.091)	32 (0.242)
Bentgrass (<i>Agrostis</i> spp.) First Application	2 to 4	-	32 (0.242)
Repeat Application(s) (if regrowth occurs)	2 to 4		32 (0.242)

DIRECTIONS FOR ANNUAL BLUEGRASS CONTROL WITH TAPOUT ALL CROPS			
GRASS SPECIES	WEED STAGE	APPLICATION RATES	
		MINIMUM RATE Fl. Oz./ A (lb. a.i./A)	MAXIMUM RATE Fl. Oz./A
Annual Bluegrass (<i>Poa annua</i>)	to 4-leaf	12* (0.091)	**
<p>Apply under favorable soil moisture and humidity, which exists within a few days after rainfall or within 7 days after irrigation. Grass needs to be actively growing at time of application(s).</p> <p>Apply at weed stage indicated on the label, as reduced control can be expected with more mature annual bluegrass.</p> <p>Use the high rate under heavy grass pressure and/or when annual bluegrass is more mature.</p> <p>See Table 1 for crop specific adjuvant recommendations.</p> <p>*Use a minimum of 17 fl. oz./A to control annual bluegrass in seedling and established alfalfa and mint.</p> <p>**See Special Use Instructions and Restrictions in Table 1, CROP SPECIFIC USE DIRECTIONS, RESTRICTIONS AND LIMITATIONS FOR TAPOUT, for maximum application rates.</p>			

**DIRECTIONS FOR USE IN ROUNDUP READY FIELD CORN (BURNDOWN)
(Not for use in California and New York)**

For control of existing stand of Roundup Ready field corn or volunteer Roundup ready field corn prior to replanting field corn.

GRASS SPECIES	WEED SIZE (inches)	APPLICATION RATES
		Rate when applied alone or with glyphosate
Field Corn	Up to 12	6 fl. Oz./A (0.0455 lb. a.i./A)
Care must be taken to avoid in-field boom (spray) overlaps or excessive crop injury may occur. Replant no sooner than 6 days after application. Adjuvant recommendations: NIS at 0.25% v/v plus AMS at 2.5 to 4 lbs./A. Restriction: DO NOT use a COC or MSO with TAPOUT in this use pattern.		

**TANK MIXES
PRODUCT INFORMATION**

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

The labels for each of the herbicides listed for tank mixing with **TAPOUT** are unique to the characteristics of those products and contain restrictions and limitations that may be more restrictive than the **TAPOUT** label in certain considerations. Those concerns may include, but are not limited to:

1. Geographic restrictions - all products are not registered for use in all areas and rates may vary from one region of labeled use to another;
2. Crop rotation restrictions;
3. Applicator certification requirements;
4. Worker safety rules (e.g. protective clothing, reentry time, posting);
5. Soil type or soil characteristics (e.g. pH, OM);
6. Maximum dosage or number of applications per season;
7. Rain free period required; or
8. Application timing (e.g. pre-harvest interval)
9. **DO NOT** exceed the total season rates.

THE MOST RESTRICTIVE LABELING OF ANY PRODUCT USED IN A TANK MIX MUST BE FOLLOWED.

TANK MIX APPLICATION OF TAPOUT AND BROADLEAF HERBICIDES FOR CONTROL OF GRASSES AND BROADLEAF WEEDS

- Apply only to actively growing grass and broadleaf weeds at specified height or growth stage listed on each label.
- Apply when the first grass or broadleaf weed species in a mixed population reaches the specified height or growth stage for treatment.
- Apply under favorable soil moisture and humidity that exist a few days after rainfall or within seven days after irrigation.
- Always add the appropriate adjuvant to the spray mix at the rate specified for each specific tank mix combination.
- Tank mix applications may sometimes result in reduced grass control and possible increases in crop injury as compared to either product used alone. If regrowth occurs, or an additional flush of new grass emerges, make a second application of **TAPOUT**, as specified in the respective size and rate tables.
- **DO NOT** tank mix **TAPOUT** when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.

MIXING INSTRUCTIONS

1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water.
2. While agitating, add the correct amount of **TAPOUT**. Agitation should create a rippling or rolling action on the water surface.
3. If tank mixing **TAPOUT** with Other labeled herbicides, add water soluble bags first, followed by dry formulations, flowables, emulsifiable concentrates and then solutions. Prepare no more spray mixture than is required for the immediate spray operation.
4. Add any required adjuvants (crop oil concentrate, non-ionic surfactant and/or nitrogen solution).
5. Fill spray tank to desired level with water. **Agitation should continue until all spray solution has been applied.**

Failure to agitate the spray solution may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

INFORMATION ON ANTAGONISM

Tank mixes of **TAPOUT** with postemergence broadleaf herbicides have shown some reduction or failure to control certain grass species which would have otherwise been controlled when **TAPOUT** is applied alone. Activity of the postemergence broadleaf herbicide in the tank mix is not affected.

ALFALFA

Table 2. TAPOUT I EC TANK MIXES WITH BROADLEAF HERBICIDES FOR ALFALFA
(Refer to the recommendation tables above for specific grassed and growth stages.)

PRODUCT ⁽¹⁾	APPLICATION RATES/ACRE ⁽²⁾		SPRAY ADDITIVES			
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND APPLICATION		AIR APPLICATION	
			Adjuvant Recommendation	AMS	Adjuvant Recommendation	AMS
TAPOUT + 2,4-DB ⁽³⁾	12 to 32 fl. oz. (0.091 to 0.242 lb. a.i.) + Refer to the 2,4-DB label	16 to 32 fl. oz. (0.121 to 0.242 lb. a.i.) + Refer to the 2,4-DB label	NIS at 0.25% v/v	AMS at 2.5 lbs./A	NIS at 0.25% v/v	17 lbs/100 gals of spray solution
TAPOUT + Imazethapyr ⁽⁴⁾	12 to 32 fl. oz. (0.091 to 0.242 lb. a.i.) + Refer to the Imazethapyr label	-	NIS at 0.25% v/v	AMS at 2.5 lbs./A	NIS at 0.25% v/v	17 lbs/100 gals. of spray solution
TAPOUT + Bromoxynil ^(5,6)	12 to 32 fl. oz. (0.091 to 0.242 lb. a.i.) + Refer to the Bromoxynil label	-	NIS at 0.25% v/v	AMS at 2.5 lbs./A	NIS at 0.25% v/v	17 lbs/100 gals. of spray solution
TAPOUT + Imazamox	12 to 32 fl. oz. (0.091 to 0.242 lb. a.i.) + Refer to the Imazamox label	-	NIS at 0.25% v/v	AMS at 2.5 lbs./A	NIS at 0.25% v/v	17 lbs/100 gals. of spray solution

1. Broadleaf weed control maybe reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not specified in these situations.

- If grass regrowth occurs or an additional flush of new grass emerges, make a second application of **TAPOUT** alone (without a tank mix herbicide), according to the appropriate size and rate recommendations.
- TAPOUT** plus 2,4-DB may increase the severity of crop injury when tank mixed. Alfalfa plants will generally outgrow this temporary crop injury within a few weeks.
- Before using this tank mix, read and understand the PURSUIT or PURSUIT DG labels for geographical restrictions and restrictions regarding alfalfa growth stage and type. Failure to do so can result in crop injury to alfalfa. **DO NOT** feed, graze or harvest alfalfa for 30 days following an application of PURSUIT to alfalfa.
- In the states of Washington, Oregon, Idaho, Montana, Wyoming, Colorado, Utah, Nevada and the western halves of North Dakota, South Dakota, Nebraska and Kansas: The **TAPOUT** plus BUCTRIL or BUCTRIL GEL tank mix must be applied in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 2 trifoliates. Unacceptable crop injury may occur to alfalfa seedlings less than the 2 trifoliolate leaf stage. **TAPOUT** plus BUCTRIL or BUCTRIL GEL applications made when temperatures are expected to exceed 80°F at and 3 days following application can result in unacceptable crop injury. In the states not listed above, apply in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 4 trifoliolate leaves. When alfalfa stand is uneven and conditions favor leafburn, unacceptable crop injury may occur to alfalfa in the 2 trifoliolate or smaller stage of growth. **TAPOUT** plus BUCTRIL or BUCTRIL GEL applications made when temperatures are expected to exceed 70°F at and 3 days following application can result in unacceptable crop injury. Crop leaf burn can occur following **TAPOUT** plus BUCTRIL or BUCTRIL GEL application. Warm, humid conditions may enhance leaf burn. New crop growth will not be affected.
- DO NOT** apply when alfalfa is under moisture, temperature, insect or disease stress or has been stressed by other pesticide carryover or application.
- Always use a CPDA Certified Adjuvant when possible.

CANOLA (Not for Use in California)

Table 3. REDUCED RATE TAPOUT TANK MIXES WITH BROADLEAF HERBICIDES FOR CANOLA
(Refer to the recommendation tables above for specific grasses and growth stages.)

PRODUCT	APPLICATION RATES/ACRE	ADJUVANT RECOMMENDATIONS	AMMONIUM SULFATE	
	ANNUAL GRASSES ⁽¹⁾		GROUND	AIR
TAPOUT ⁽²⁾ + Glufosinate ⁽³⁾	8 to 10 fl. (0.061 to 0.076 lb. a.i.) + Refer to the Glufosinate label.	NIS at 0.25% v/v	3 lbs./A	3 lbs./A
TAPOUT + Clopyralid ⁽⁴⁾	8 to 10 fl. oz. (0.061 to 0.076 lb. a.i.) + Refer to the Clopyralid Label	NIS at 0.25% v/v	3 lbs./A	3 lbs./A

- Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE USE TO CONTROL SMALL ANNUAL GRASSES table.
- DO NOT** apply **TAPOUT** tank mix during or after bolting or flowering or crop injury will occur.
- For use only on LIBERTY LINK® Canola.
- See STINGER label for weeds controlled.
- Always use a CPDA Certified Adjuvant when possible.

COTTON

Table 4. TAPOUT TANK MIXED WITH COBRA AND MSMA APPLIED POST DIRECTED TO COTTON

PRODUCT ⁽¹⁾	APPLICATION RATES/ACRE ⁽²⁾		CROP OIL CONCENTRATE ⁽³⁾	COMMENTS
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	
TAPOUT + Lactofen + MSMA (4 lbs./gal.) OR MSMA (6.6 lbs./gal.)	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.)	16 to 32 fl. oz. (0.121 to 0.242 lb. a.i.)	1%	Reduce broadcast rate in proportion to the band area actually treated.
	See COBRA label for rates to control broadleaf weeds and height limitations for cotton. Refer to the TAPOUT label for weed height and species controlled.			
	See MSMA label for rates to control broadleaf weeds and height limitations for cotton. Refer to the TAPOUT label for weed height and species controlled.			

1. Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not specified in these situations.
2. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of **TAPOUT** alone (without a tank mix herbicide), according to the appropriate size and rate recommendations.
3. Always use a crop oil concentrate at the listed rate (but not less than 1 pt/A) in the finished spray volume.
4. If at the time of application, grass height is so tall that post-directed applications cannot get good coverage over the top of the grassy weeds, then poor control may result and a second (non-post directed) application of **TAPOUT** may be necessary.
5. Always use a CPDA Certified Adjuvant when possible.

Table 5. TAPOUT TANK MIXED WITH GLYPHOSATE TO CONTROL EMERGED GRASSES IN COTTON AS A BROADCAST APPLICATION

PRODUCT	APPLICATION RATE/ACRE (1)		ADJUVANT		COMMENTS
	ANNUAL GRASSES	PERENNIAL GRASSES	Glyphosate formulation with built in adjuvant.	Glyphosate formulation without built in adjuvant.	
TAPOUT + GLYPHOSATE	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.)	12 to 32 fl. oz. (0.091 to 0.242 lb. a.i.)	Ammonium sulfate at 8.5 to 17 lbs. per 100 gals. of carrier plus glyphosate label adjuvant recommendation.	Ammonium sulfate at 8.5 to 17 lbs. per 100 gals. Of carrier plus NIS at 0.25% v/v.	See charts for grasses controlled. Use a minimum of 10 gals. Of spray solution per acre.
	See glyphosate label for rates to control broadleaf weeds and height limitations for cotton.				

1. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of **TAPOUT** at the specified rate with the appropriate amount of crop oil.
2. Always use a CPDA Certified Adjuvant when possible.

DRY AND SUCCULENT SHELLED BEANS

Table 6. TAPOUT TANK MIXES WITH BROADLEAF HERBICIDES FOR DRY AND SUCCULENT SHELLED BEANS (Refer to the recommendation tables above for specific grasses and growth stages.)

PRODUCT (1)	APPLICATION RATES/ACRE (2)		ADJUVANT	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
TAPOUT + Bentazon(3)	9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.) + Refer to the Bentazon label	12 to 24 fl. oz. (0.091 to 0.182 lb. a.i.) + Refer to the Bentazon label	COC at 1% v/v + AMS at 2.5 lbs./A	COC at 1% v/v + AMS at 17 lbs./100 gal. v/v
TAPOUT + Imazamox(3)	9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.) + Refer to the Imazamox label	-	NIS at 0.25% v/v + AMS at 2.5 lbs./A	NIS at 0.25% v/v + AMS at 17 lbs./100 gal.

1. Broadleaf weed control may be reduced when grass populations are tall enough or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not specified in these situations.
2. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of **TAPOUT** alone (without a tank mix herbicide), according to the appropriate size and rate recommendations.
3. **Always read and follow label directions for all tank mix products before using. The most restrictive labeling of any tank mix product must be followed.**
4. Always use a CPDA Certified Adjuvant when possible.

FLAX (Not for Use in California)

Table 7. REDUCED RATE TAPOUT TANK MIXES WITH BROADLEAF HERBICIDES FOR FLAX
(Refer to the recommendation tables above for specific grasses and growth stages.)

PRODUCT	APPLICATION RATES/ACRE	ADJUVANT	
	ANNUAL GRASSES ⁽¹⁾	GROUND	AIR
TAPOUT + Bromoxynil ^(2,3)	6 to 9 fl. oz. (0.045 to 0.068 lb. a.i.) + Refer to the Bromoxynil label	AMS at 2.4 to 4.0 lbs/A + NIS at 5% v/v	AMS at 2.5 to 4.0 lbs./A
TAPOUT + MCPA ^(2,3)	8 to 10 fl. oz. (0.061 to 0.076 lb. a.i.) + Refer to the MCPA label	AMS at 2.4 to 4.0 lbs./A + NIS at 0.125% v/v	AMS at 2.5 to 4.0 lbs/A
TAPOUT + Clopyralid ^(2,3)	6 to 9 fl. oz. (0.045 to 0.068 lb. a.i.) + Refer to the Clopyralid label	AMS at 2.4 to 4.0 lbs./A + NIS at 0.125% v/v	AMS at 2.5 to 4.0 lbs./A

1. Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE USE TO CONTROL SMALL ANNUAL GRASSES table.
2. **DO NOT** apply **TAPOUT** tank mix during or after the bud stage or to ornamental flax or crop injury may occur.
3. **DO NOT** apply tank mixes if temperatures are expected to exceed 85F at (or 3 days following) application or crop injury may occur.
4. Always use a CPDA Certified Adjuvant when possible.

PEANUT

Table 8. TAPOUT TANK MIXES WITH BROADLEAF HERBICIDES FOR PEANUT
(Refer to the recommendation tables above for specific grasses and growth stages.)

PRODUCT ⁽¹⁾	APPLICATION RATES/ACRE ⁽²⁾	ADJUVANT RECOMMENDATIONS	
	ANNUAL GRASSES	GROUND	AIR
TAPOUT + Bentazon	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.) + Refer to the Bentazon label	COC at 1% v/v + AMS at 2.5 lbs./A	COC at 1% v/v + AMS at 17 lbs. /100 gals.
TAPOUT + Sodium Acifluorfen	9 to 16 fl. oz. (0.068 to 0.121 lb. a.i.) + Refer to the Sodium Acifluorfen label	COC at 1% v/v + AMS at 2.5 lbs/A	COC at 1% v/v + AMS at 17 lbs. /100 gals.

1. Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not specified in these situations.
2. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of **TAPOUT** alone (without a tank mix herbicide), according to the appropriate size and rate recommendations.
3. Always use a CPDA Certified Adjuvant when possible.

**DIRECTIONS FOR GRASS SUPPRESSION FOR HARVEST EFFICIENCY
IN PEANUT WITH TAPOUT**

GRASS SPECIES	WEED STAGE	APPLICATION RATES	
		MINIMUM RATE fl. oz./A	MAXIMUM RATE fl. oz./A
Annual and perennial grasses that exceed height claimed for control on height charts “RECOMMENDATIONS FOR ANNUAL GRASSES” and “RECOMMENDATIONS FOR PERENNIAL GRASSES”	Up to and including grasses in the seed head stage	32 (0.242 lb. a.i.)	64 (0.485 lb. a.i.)

- **DO NOT** apply as part of a tank mix when applying TAPOUT for grass suppression.
- Add a crop oil concentrate at 1 gal. /A by ground to the finished spray volume.
- Always use a CPDA Certified Adjuvant when possible.

SOYBEAN

Table 9. TAPOUT TANK MIX WITH BROADLEAF HERBICIDES FOR THE CONTROL OF VOLUNTEER CORN (INCLUDING ROUNDUP READY) IN SOYBEAN

(Refer to the recommendation tables above for specific volunteer corn sizes and use rates.)

PRODUCT	WEED SIZE AND APPLICATION RATES		SPRAY ADDITIVES			
	VOLUNTEER CORN HEIGHT (inches)	TAPOUT RATES/ACRE	GROUND APPLICATION		AIR APPLICATION	
			NIS	AMS	NIS	AMS
TAPOUT + glyphosate (1,2,3) Refer to the Glyphosate label (ROUNDUP READY soybeans only)	Up to 12 Up to 24 Up to 36	6 fl. oz. (0.045 lb. a.i.) 9 fl. oz. (0.068 lb. a.i.) 12 fl. oz. (0.091 lb. a.i.)	Adjuvant Loaded Glyphosate: None Required Adjuvant Unloaded Glyphosate: NIS at 0.25% v/v	8.5 to 17 lbs/100 gals of spray solution	Adjuvant Loaded Glyphosate: None Required Adjuvant Unloaded Glyphosate: NIS at 0.25% v/v	8.5 to 17 lbs/100 gals. of spray solution
TAPOUT + Cloransulam Refer to the Cloransulam label	Up to 12 Up to 24 Up to 36	6 fl. oz. (0.045 lb. a.i.) 9 fl. oz. (0.068 lb. a.i.) 12 fl. oz. (0.091 lb. a.i.)	NIS at 0.25% v/v	AMS at 2.5 lbs./A	NIS at 0.25% v/v	17 lbs./100 gals. of spray solution
TAPOUT + Imazethapyr Refer to the Imazethapyr label	Up to 12 Up to 24 Up to 36	6 fl.oz. (0.045 lb. a.i.) 9 fl. oz. (0.068 lb. a.i.) 12 fl. oz. (0.091 lb. a.i.)	NIS at 0.25% v/v	AMS at 2.5 lbs./A	NIS at V 0.25% v/v	17lbs./100 gals. of spray solution
TAPOUT + Imazamox Refer to the Imazamox label	Up to 12 Up to 24 Up to 36	6 fl. oz. (0.045 lb. a.i.) 9 fl. oz. (0.068 lb. a.i.) 12 fl. oz. (0.091 lb. a.i.)	NIS at 0.25% v/v	AMS at 2.5 lbs/A	NIS at 0.25% v/v	17 lbs./100 gals. of spray solutions

1. This tank mix may be applied postemergence to ROUNDUP Ready soybeans up through the full flowering stage.
DO NOT apply less than 60 days before harvest.

2. Avoid contact with foliage, green stems or fruit crops or any desirable plants and trees, other than soybeans with the ROUNDUP Ready gene as severe plant injury or death will result.
3. **DO NOT** allow the **TAPOUT** plus glyphosate to mist, drip, drift or splash onto desirable vegetation as minute quantities of the tank mix can cause severe damage or destruction to the crops, plants or other areas on which treatment was not intended. The likelihood of injury occurring from drift of this product is greatest when winds are gusty or in excess of 5 miles per hour. Even under lesser wind velocities, avoid conditions that allow spray drift to occur such as combinations of spray pressure and nozzle type that will result in fine particles (mist) that are likely to drift.
4. Always use a CPDA Certified Adjuvant when possible.

Table 10. TAPOUT TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN
(Refer to the recommendation tables above for specific grasses and growth stages.)

PRODUCT	APPLICATION RATES/ACRE ⁽²⁾	SPRAY ADDITIVE RECOMMENDATIONS				
		ANNUAL GRASSES ⁽³⁾	GROUND APPLICATION		AIR APPLICATION	
			COC/NIS ⁽⁴⁾	AMS	COC/NIS ⁽⁴⁾	AMS
TAPOUT + Lactofen	9 to 20 fl. oz. (0.068 to 0.151 lb. a.i.) + Refer to the Lactofen label	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1 to 2 pts./A	AMS at 2.5 lbs/A	NIS at 0.25% v/v plus COC at 0.25% v/v or COC 1% v/v (but not less than 1 pt/A)	17 lbs./100 gals. of spray solution	
TAPOUT + Cloransulam ⁽⁵⁾	9 to 20 fl. oz. (0.068 to 0.151 lb. a.i.) + Refer to the Cloransulam label	NIS at 0.25% v/v or COC at 1 pt./A	AMS at 2.5 lbs./A	NIS at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)	17 lbs/100 gals. of spray solution	
TAPOUT + Fomesafen ⁽⁵⁾	9 to 20 fl. oz. (0.068 to 0.151 lb. a.i.) + Refer to the Fomesafen label	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1 to 2 pts./A	AMS at 2.5 lbs/A	NIS at 0.25% plus COC at 0.25% v/v or COC at 1% v/v (but not less than 1 pt/A)	17 lbs/100 gals. of spray solution	
TAPOUT + Thifensulfuron ⁽⁵⁾	9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.) + Refer to the Thifensulfuron label	NIS at 0.125 to 0.25% v/v	AMS at 2.5 lbs/A	-	-	
TAPOUT + Lactofen.	9 to 20 fl. oz. (0.068 to 0.151 lb. a.i.) + Refer to the Lactofen label	NIS at 0.25% v/v plus COC at 0.125 to 0.25% v/v or COC at 1 pt./A	AMS at 2.5 lbs/A	NIS at 0.25% plus COC at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)	17 lbs./100 gals. of spray solution	

TAPOUT + Imazethapyr ⁽⁵⁾	12 to 20 fl. oz. (0.091 to 0.151 lb. a.i.) + Refer to the Imazethapyr label	NIS at 0.25% v/v or COC at 1 pt./A	AMS at 2.5 lbs/A	MS at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)	17 lbs./100 gals. of spray solution
TAPOUT + Imazamox ⁽⁵⁾	12 to 20 fl. oz. (0.091 to 0.151 lb. a.i.) + Refer to the Imazamox label	NIS at 0.25% v/v or COC at 1 pt./A	AMS at 2.5 lbs./A	NIS at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)	17 lbs./100 gals. of spray solution
TAPOUT + Flumiclorac	9 to 20 fl. oz. (0.068 to 0.151 lb. a.i.) + Refer to the Flumiclorac label	NIS at 0.25% v/v plus CCC at 0.25% v/v or COC at 1 to 2 pts./A	AMS at 2.5 lbs/A	-	-
TAPOUT + Lactofen + Cloransulam ⁽⁵⁾	9 to 20 fl. oz. (0.068 to 0.151 lb. a.i.) + Refer to the Lactofen label + Refer to the Cloransulam label	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1 to 2 pts./A	AMS at 2.5 lbs/A	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)	17 lbs./100 gals. of spray solution
TAPOUT + Lactofen + Thifensulfuron ⁽⁵⁾	9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.) + Refer to the Lactofen label + Refer to the Thifensulfuron label	NIS at 0.125 to 0.25% v/v plus COC at 0.125% v/v	AMS at 2.5 lbs/A	-	-
TAPOUT + Lactofen + Imazethapyr ⁽⁵⁾	12 to 20 fl. oz. (0.091 to 0.151 lb. a.i.) + Refer to the Lactofen label + Refer to the Imazethapyr label	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1 to 2 pts./A	AMS at 2.5 lbs/A	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)	17 lbs./100 gals. of spray solution
TAPOUT + Lactofen + Imazamox ⁽⁵⁾	12 to 20 fl. oz. (0.091 to 0.151 lb. a.i.) + Refer to the Lactofen label + Refer to the Imazamox label	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1 to 2 pts./A	AMS at 2.5 lbs./A	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)	17 lbs./100 gals. of spray solution

<p>TAPOUT + Lactofen + Flumiclorac</p>	<p>9 to 20 fl. oz. (0.068 to 0.151 lb. a.i.) + Refer to the Lactofen label + Refer to the Flumiclorac label</p>	<p>NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1 to 2 pts./A</p>	<p>AMS at 2.5 lbs/A</p>	<p>-</p>	<p>-</p>
<p>TAPOUT + Cloransulam + Fomesafen⁽⁵⁾</p>	<p>9 to 20 fl. oz. (0.068 to 0.151 lb. a.i.) ÷ Refer to the Cloransulam label + Refer to the Fomesafen label</p>	<p>NIS at 0.25% v/v plus COC at 0.25% v/v or Equivalent blended product or COC at 1 to 2 pts./A</p>	<p>AMS at 2.5 lbs/A</p>	<p>NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)</p>	<p>17 lbs./100 gals. of spray solution</p>
<p>TAPOUT + Chlorimuron + Thifensulfuron⁽⁵⁾</p>	<p>12 to 20 fl. oz. (0.091 to 0.151 lb. a.i.) + Refer to the Chlorimuron label + Refer to the Thifensulfuron label</p>	<p>NIS at 0.25% v/v or COC at 1 pt./A</p>	<p>AMS at 2.5 lbs./A</p>	<p>NIS at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)</p>	<p>17 lbs./100 gals. of spray solution</p>
<p>TAPOUT + Chlorimuron + Thifensulfuron⁽⁵⁾ (STS Soybeans Only)</p>	<p>12 to 20 fl. oz. (0.091 to 0.151 lb. a.i.) + Refer to the Chlorimuron label + Refer to the Thifensulfuron label</p>	<p>NIS at 0.25% v/v or COC at 1 pt./A</p>	<p>AMS at 2.5 lbs./A</p>	<p>NIS at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)</p>	<p>17 lbs./100 gals. of spray solution</p>
<p>TAPOUT + Lactofen + Flumiclorac + Cloransulam⁽⁵⁾</p>	<p>9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.) + Refer to the Lactofen label + Refer to the Flumiclorac label + Refer to the Cloransulam label</p>	<p>NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1 to 2 pts./A</p>	<p>AMS at 2.5 lbs./A</p>	<p>-</p>	<p>-</p>

TAPOUT + Lactofen + Chlorimuron + Thifensulfuron ⁽⁵⁾	12 to 20 fl. oz. (0.091 to 0.151 lb. a.i.) + Refer to the Chlorimuron label + Refer to the Thifensulfuron label	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1 to 2 pts./A	AMS at 2.5 lbs/A	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)	17 lbs./100 gals. of spray solution
TAPOUT + Lactofen + Chlorimuron + Thifensulfuron ⁽⁵⁾ (STS Soybeans Only)	12 to 20 fl. oz. (0.091 to 0.151 lb. a.i.) + Refer to the Chlorimuron label + Refer to the Thifensulfuron label	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1 to 2 pts./A	AMS at 2.5 lbs./A	NIS at 0.25% v/v plus COC at 0.25% v/v or COC at 1% v/v (but not less than 1 pt./A)	17 lbs./100 gals. of spray solution

1. Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not specified in these situations.
2. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of **TAPOUT** alone (without a tank mix herbicide), according to the appropriate size and rate recommendations.
3. Annual grasses and sizes controlled with these tank mixtures are those that are identified in the **RECOMMENDATIONS FOR ANNUAL GRASSES** table.
4. Contact local Helena Agri-Enterprises, LLC representative for proper COC/NIS adjuvant selection.
5. Refer to cloransulam, fomesafen, thifensulfuron-methyl, imazethapyr, imazamox, and chlorimuron-ethyl for geographic and rotational restrictions.
6. Always use a CPDA Certified Adjuvant when possible.

SUGAR BEET

Table 11. TAPOUT TANK MIXED WITH BROADLEAF SUGAR BEET HERBICIDES

<u>PRODUCTS</u>	<u>APPLICATION RATES/A</u>	<u>ADJUVANT INFORMATION</u>
<u>TAPOUT</u> + <u>Desmedipham + Phenmedipham</u> Or <u>Desmedipham</u> or <u>Desmedipham + Phenmedipham +</u> <u>Ethofumesate</u> and/or <u>Clopyralid</u> and/or <u>Trisulfuron-methyl</u>	<u>9 to 12 fl. oz.</u> <u>(0.068 to 0.091 lb. a.i.)</u> <u>See label for rate information.</u> <u>See label for rate information.</u> <u>See label for rate information.</u> <u>See label for rate information.</u> <u>See label for rate information.</u>	 <u>None required</u> <u>None required</u> <u>None required</u> <u>NIS at 0.25%</u> <u>NIS at 0.25%</u>

TABLE 12. TAPOUT PLUS DESMEDIPHAM OR PHENMEDIPHAM TANK MIX FOR THREE SEQUENTIAL APPLICATIONS FOR ANNUAL GRASS CONTROL (MICRO RATE APPLICATION)

<u>PRODUCT</u>	<u>APPLICATION RATES/ACRE⁽¹⁾</u>	<u>GRASSES CONTROLLED (inches)</u>	<u>METHYLATED SEED OIL⁽²⁾</u>	
	<u>ANNUAL GRASSES</u>		<u>GROUND</u>	<u>AIR</u>
<u>TAPOUT</u>	<u>3 to 6 fl. oz.</u> <u>(0.023 to 0.045 lb. a.i.)</u>	<u>Green Foxtail (1 to 2)</u> <u>Yellow Foxtail (1 to 2)</u> <u>Barnyardgrass (1 to 2)</u>	<u>1.5% v/v</u>	<u>1.5% v/v</u>
<u>+ Desmedipham + Phenmedipham</u>	<u>Refer to label</u>	<u>Wild Oat (1 to 2)</u> <u>Volunteer Cereals (1 to 2)</u>		
<u>Or Desmedipham</u>	<u>Refer to label</u>			
<u>or Desmedipham + Phenmedipham + Ethofumesate</u>	<u>Refer to label</u>			
<u>and/or Clopyralid</u>	<u>Refer to label</u>			
<u>and/or Trisulfuron-methyl</u>	<u>Refer to label</u>			

- 1) Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not specified in these situations.
- 2) Always use a methylated seed oil at the listed rate (but not less than 1 pt/A) in the finished spray volume.
- 3) Always use a CPDA Certified Adjuvant when possible.

Directions for Use for Micro-Rate Applications to Sugar Beet

Multiple micro-rate applications of **TAPOUT** in tank mixtures with reduced rates of Desmedipham + Phenmedipham and methylated seed oils may be applied by air or ground equipment to sugar beet to control early germinating annual grasses listed above. All use precautions and restrictions on the Desmedipham + Phenmedipham master labels must be followed.

Table 13. TANK MIX APPLICATION OF TAPOUT AND FUNGICIDES FOR CONTROL OF GRASS WEEDS AND DISEASES IN SUGAR BEET

<u>PRODUCT⁽¹⁾</u>	<u>APPLICATION RATES/ACRE⁽²⁾</u>		<u>ADJUVANT</u>
	<u>ANNUAL GRASSES</u>	<u>PERENNIAL GRASSES</u>	
<u>TAPOUT</u>	<u>9 to 12 fl. oz.</u> <u>(0.068 to 0.091 lb. a.i.)</u>	<u>12 to 24 fl. oz.</u> <u>(0.091 to 0.182 lb. a.i.)</u>	<u>NIS at 0.25% v/</u>
<u>+ Tetraconazole</u>	<u>Refer to label</u>	<u>Refer to label</u>	
<u>TAPOUT</u>	<u>9 to 12 fl. oz.</u> <u>(0.068 to 0.091 lb. a.i.)</u>	<u>12 to 24 fl. oz.</u> <u>(0.091 to 0.182 lb. a.i.)</u>	<u>NIS at 0.25% v/v</u>
<u>+ Pyraclostrobin</u>	<u>Refer to label</u>	<u>Refer to label</u>	
<u>TAPOUT</u>	<u>9 to 12 fl. oz.</u> <u>(0.068 to 0.091 lb. a.i.)</u>	<u>12 to 24 fl. oz.</u> <u>(0.091 to 0.182 lb. a.i.)</u>	<u>NIS at 0.25% v/v</u>
<u>+ Trifloxystrobin</u>	<u>Refer to label</u>	<u>Refer to label</u>	

- 1) Refer to **TAPOUT** and fungicide label for rates and weeds and diseases controlled.
- 2) If grass regrowth occurs, or an additional flush of new grass emerges, make a second application of **TAPOUT** alone (without a tank mix fungicide) according to the appropriate size and rate recommendations.
- 3) Always use a CPDA Certified Adjuvant when possible.

Table 14. TANK MIX APPLICATION OF TAPOUT AND INSECTICIDES FOR CONTROL OF GRASS WEEDS AND INSECTS IN ALFALFA, COTTON, MINT, PEANUT (INCLUDING PERENNIAL), SOYBEAN AND SUNFLOWER

PRODUCT ⁽¹⁾	APPLICATION RATES/ACRE ⁽²⁾		ADJUVANT RECOMMENDATION	CROPS					
	ANNUAL GRASSES	PERENNIAL GRASSES		Alfalfa ⁽³⁾	Cotton	Mint ^(3,4)	Peanut	Soybean	Sunflower
TAPOUT + Esfenvalerate	9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.) + Refer to Esfenvalerate label	12 to 24 fl. oz. (0.091 to 0.182 lb. a.i.) + Refer to Esfenvalerate label	NIS at 0.25% v/v + AMS at 2.5 lbs./A					X	X
TAPOUT + <i>B</i> -cyfluthrin	9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.) + Refer to <i>B</i> -cyfluthrin label	12 to 24 fl. oz. (0.091 to 0.182 lb. a.i.) + Refer to <i>B</i> -cyfluthrin label	NIS at 0.25% v/v + AMS at 2.5 lbs./A	X					X
TAPOUT + Fenpropathrin	9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.)+ Refer to Fenpropathrin label	12 to 24 fl. oz. (0.091 to 0.182 lb. a.i.) + Refer to Fenpropathrin label	NIS at 0.25% v/v + AMS at 2.5 lbs/A		X		X		
TAPOUT + Dimethoate	9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.) + Refer to Dimethoate label	12 to 24 fl. oz. (0.091 to 0.182 lb. a.i.) + Refer to Dimethoate label	NIS at 0.25% v/v + AMS at 2.5 lbs./A	X					X
TAPOUT + Acephate	9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.) + Refer to Acephate label	12 to 24 fl. oz. (0.091 to 0.182 lb. a.i.) + Refer to Acephate label	NIS at 0.25% v/v + AMS at 2.5 lbs./A		X	X	X	X	
TAPOUT + Permethrin	9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.) + Refer to Permethrin label	12 to 24 fl. oz. (0.091 to 0.182 lb. a.i.) + Refer to Permethrin label	NIS at 0.25% v/v + AMS at 2.5 lbs/A	X		X			
TAPOUT. + Lambda- Cyhalothrin	9 to 12 fl. oz. (0.068 to 0.091 lb. a.i.) + Refer to Lambda- Cyhalothrin label	12 to 24 fl. oz. (0.091 to 0.182 lb. a.i.) + Refer to Lambda- Cyhalothrin label	NIS at 025% v/v + AMS at 2.5 lbs./A			X	X		

- 1) Refer to **TAPOUT** and insecticide label for rates and weeds and insects controlled.
- 2) If grass regrowth occurs, or an additional flush of new grass emerges, make a second application of **TAPOUT** alone (without a tank mix insecticide) according to the appropriate size arid rate recommendations.
- 3) Certain insecticides may cause temporary phytotoxic symptoms on alfalfa and mint foliage. Refer to the insecticide label for further information. It is suggested that prior to using any of these insecticide/herbicide tank mixtures, that a small area of the field be treated first and observations for crop injury be made prior to treating the whole field.

- 4) The **TAPOUT** rate should be 9 to 12 fl. oz./A for annual grass control in baby mint, minimum of 12 fl. oz./A for annual grass control in established mint and 16 to 32 fl. oz./A for perennial grass control.
- 5) Always use a CPDA Certified Adjuvant when possible.

FALLOW LAND

DIRECTIONS FOR USE

TAPOUT may be used to control annual and perennial grasses in land that has been left fallow the previous year and other non-producing agricultural areas. Apply **TAPOUT** at 12 to 16 fl. oz./A (0.091 to 0.121 lb. a.i./A) for annual grasses and 16 to 32 fl. oz./A (0.121 to 0.242 lb. a.i./A) for perennial grasses. When both grass and broadleaf weeds are the target pest, **TAPOUT** may be tank mixed with 2,4-D ester or BANVEL® SGF for broad spectrum control. When both annual and perennial grasses occur in the same field, use a minimum of 16 fl oz./A (0.121 lb. a.i./A) **TAPOUT** rate.

PRECAUTIONS:

- Use a minimum spray volume of 5 gals./A for aerial applications and 15 gals./A for ground applications. Apply only to actively growing grasses when the first grass reaches the specified weed height as specified by the Directions for Annual and Perennial Grasses section of this label.
- Annual grasses that emerge after the **TAPOUT** application will not be controlled, and a second application may be necessary.
- The control of perennial grasses may require more than 1 application in non-tilled areas.

RESTRICTIONS:

- **DO NOT** apply more than 32 fl oz/A (0.242 lb ai/A) **TAPOUT** per application.
- **DO NOT** make more than 2 applications per acre per year.
- For repeat applications make on a minimum of a 14 day interval.
- **DO NOT** apply more than 64 fl oz/A (0.485 lb ai/A) **TAPOUT** per year.
- **DO NOT** apply to grasses that have tillered, formed seedheads or exceeded specified growth stage.
- **DO NOT** use flood jet nozzles.
- **DO NOT** apply to drought stressed grasses.
- **DO NOT** mow area for 2 weeks prior to or after the **TAPOUT** application.

TABLE 15. TAPOUT IN TANK MIXES TO CONTROL ANNUAL AND PERENNIAL GRASSES IN FALLOW LAND

PRODUCT	APPLICATION RATES/ACRE ⁽¹⁾		ADJUVANT RECOMMENDATION	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
TAPOUT + 2,4-D ester or Dicamba	12 to 16 fl. oz. (0.091 to 0.121 lb. a.i.) + Refer to 2,4-D ester label or Refer to Dicamba label	16 to 32 fl. oz. (0.121 to 0.242 lb. a.i.) + Refer to 2,4-D ester label or Refer to Dicamba label	NIS at 0.25% v/v or COC at 1% + AMS at 2.5 lbs./A	NIS at 0.25% v/v or COC at 1% + AMS at 17 lbs./100 gals.

- 1) Refer to **TAPOUT** label for weed height and species control. Review Dicamba and 2,4-D labels for crop restrictions, use rates and weeds controlled.
- 2) Always use a CPDA Certified Adjuvant when possible.

TABLE 16. TAPOUT FOR THE CONTROL AND/OR SUPPRESSION OF TALL FESCUE IN NATIVE PRAIRIE WARM-SEASON GRASS RESTORATION PROJECTS

PRODUCT	PRODUCT RATE	GRASS WEEDS CONTROLLED/SUPPRESSED		WEED STAGE
		Common Name	Scientific Name	
TAPOUT	12 to 16 fl. oz./A (0.091 to 0.121 lb. a.i./A)	Tall Fescue	<i>Festuca arundinacea</i>	4 to 6 inches tall (40 to 60% green-up)

Adjuvant: TAPOUT must be applied with non-ionic surfactant at 0.25% v/v, plus a spray grade ammonium sulfate at 2.5 to 4 lbs./A.

Mixing Order: Thoroughly mix spray grade ammonium sulfate in water, add TAPOUT, then add non-ionic surfactant.

Always use a CPDA Certified Adjuvant when possible.

SPECIAL APPLICATION INSTRUCTIONS/PRECAUTIONS

Burn or mow fields a minimum of 3 weeks prior to application to remove excess crop residue. Apply in the spring, at 40 to 60% tall fescue green-up, prior to emergence of warm-season grasses. **DO NOT** mow area for 2 weeks after the TAPOUT application.

Apply in a minimum of 15 to 20 gals of water per acre at a spray pressure of 40 to 60 PSI at the nozzle. Apply using flat fan or hollow cone nozzles. **DO NOT** use flood jet nozzles.

Apply only to fields that have warm-season grasses established for 2 years. Applications of TAPOUT to emerged warm-season grasses may cause injury. **DO NOT** apply to warm-season grasses grown for seed.

Restriction: DO NOT graze treated fields or feed treated forage and or hay to livestock.

NOTE: TAPOUT applications are most effective if applied when average nighttime temperatures are consistently greater than or equal to 47 degrees Fahrenheit.

TABLE 17. TAPOUT FOR THE SUPPRESSION OF TALL FESCUE SEED-HEADS IN NON- PRODUCING AGRICULTURAL AREAS

PRODUCT	PRODUCT RATES	SUPPRESSION	APPLICATION TIMING
TAPOUT	3 to 4 fl. oz./A (0.023 to 0.03 lb. a.i./A)	Tall Fescue Seed-Heads (<i>Festuca arundinacea</i>)	(50 to 90% Tall Fescue green-up in the spring) or 3 weeks prior to dormancy in the fall.

ADJUVANT: TAPOUT must be applied with crop oil concentrate at 1 qt. /A, plus a spray grade ammonium sulfate at 2.5 to 4 lb. /A.

Recommended Mixing Order: Thoroughly mix spray grade ammonium sulfate in water, add TAPOUT, then add crop oil concentrate.

Note: Use crop oil concentrate at 2 pts. /A with fall applications.

SPECIAL APPLICATION INSTRUCTIONS/PRECAUTIONS

- Apply at 50 to 90% tall fescue green-up.
- Use the higher TAPOUT rate if less tall fescue green matter is present.
- Apply in a minimum of 15 to 20 gals of water per acre at a spray pressure of 40 to 60 psi at the nozzle. Apply using flat fan or hollow cone nozzles. **DO NOT** use flood nozzles.
- 2,4-D ester, picloram, or triclopyr maybe added to this tank mix for broadleaf control (see 2,4-D ester label for weeds controlled)

Restrictions

- **DO NOT** mow area for 2 weeks after the TAPOUT application.
- **DO NOT** use flood nozzles.
- **DO NOT** graze treated fields or feed treated forage and or hay to livestock.

DIRECTIONS FOR USE IN ORNAMENTALS

For ornamental plant uses, **TAPOUT** can be used to control labeled grass weeds in greenhouses, lathhouses, shadehouses, and around outdoor ornamentals, including nurseries, parks, roadside plantings, and structure landscapes.

IMPORTANT

TAPOUT successfully controls weeds in newly transplanted and established non-grassy ornamentals. Plant tolerance to **TAPOUT** at labeled rates has been found to be acceptable for the indicated genera and species listed below. Due to variability within species, crop growth stage, environmental conditions, and application techniques, it is recommended that the user determine if herbicide can be used safely on a few plants prior to widespread application. Neither the seller nor the manufacturer of **TAPOUT** has investigated the safety factor to ornamental plants not listed on the label.

The following plants have shown a tolerance for **TAPOUT** applications:

ORNAMENTAL TREES

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
Alder, Red	<i>Alnus rubra</i>	Goldon Chain Tree	<i>Laburnum anagyroides</i>
Ash	<i>Fraxinus</i> spp.	Maples	<i>Acer</i> spp.
Basswood	<i>Tilia</i> spp.	Mulberry, White	<i>Morus alba</i>
Birch, European	<i>Betula pendula</i>	Oaks	<i>Quercus</i> spp.
White	<i>Betula nigra</i>	Olive, Wild	<i>Elaea gnus angustifolia</i>
Birch, River	<i>Betula papyrifera</i>	Redbud, Eastern	<i>Cercis canadensis</i>
Birch, White	<i>Malus halliana</i>	Sweet Gum, American	<i>Liquidambar styraciflua</i>
Crabapple, Flowering	<i>Cornus florida</i>		
Dogwood, Flowering			

GROUND COVERS

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
Bugleweed, Carpet	<i>Ajuga reptans</i>
Ivy, English	<i>Hedera helix</i>
Japanese Spurge	<i>Pachysandra terminalis</i>
Lilyturf	<i>Liriope muscari</i>
Moneywort	<i>Lysimachia nummularia</i>
Mondo Grass, White	<i>Ophiopogon jaburan</i>
Mondo Grass Dwarf	<i>Ophiopogo japonicus</i>
Periwinkle, Lesser	<i>Vinca minor</i>

GARDEN FLOWERS AND PLANTS

*slight foliage or flower speckling has been observed on these species.

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
Ageratum	<i>Ageratum</i> spp.	Jasmine Tobacco	<i>Nicotiana glauca</i>
Alyssum*, Sweet	<i>Lobularia maritima</i>	Loosestrife	<i>Lythrum salicaria</i>
Asparagus Fern	<i>Asparagus setaceus</i>	Marigold	<i>Tagetes</i> spp.
Bleeding Heart	<i>Dicentra spectabilis</i>	Partridgeberry	<i>Mitchella repens</i>
Cast Iron Plant	<i>Aspidistra elatior</i>	Petunia*	<i>Petunia hybrida</i>
Chrysanthemum	<i>Chrysanthemum</i> spp.	Phlox	<i>Phlox</i> spp.
Cinquefoil	<i>Potentilla</i> spp.	Pinks	<i>Dianthus</i> spp.
Coleus	<i>Coleus</i> spp.	Portulaca	<i>Portulaca grandiflora</i>
Coralbells	<i>Heuchera sanguinea</i>	Salvia	<i>Salvia</i> spp.
Cranesbill	<i>Geranium</i> spp.	Saxifrage	<i>Saxifraga</i> spp.
Dahlia	<i>Dahlia</i> spp.	Sedum	<i>Sedum</i> spp.
Daisy, Trailing	<i>Osteospermum fruticosum</i>	Selloum	<i>Philodendron selloum</i>
African	<i>Hemerocallis</i> spp.	Snapdragon*	<i>Antirrhinum majus</i>
Daylily	<i>Senecio cineraria</i>	Sweet Flag	<i>Acorus gramineus</i>
Dusty Miller	<i>Euonymus</i> spp.	Tickseed	<i>Coreopsis grandiflora</i>
		Touch-Me-Not	<i>Impatiens</i> spp.
		Verbena	<i>Verbena</i> spp.
		Violet	<i>Viola</i> spp.

<u>Euonymus</u> <u>Gazania</u> <u>Geranium, House</u> <u>Heather, False</u> <u>Hosta</u> <u>Iris</u>	<u>Gazania spp.</u> <u>Pelargonium hortorum</u> <u>Cuphea hyssopifolia</u> <u>Hosta fortunei</u> <u>Iris spp.</u>	<u>Yarrow, Common</u> <u>Zinnia</u>	<u>Achillea millefolium</u> <u>Zinnia elegans</u>
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SHRUBS

*Slight foliage or flower speckling has been observed on these species.

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
Abelia	<i>Abelia</i> spp.	Jasmine	<i>Jasminum</i> spp.
Anise, Purple	<i>Illicium floridanum</i>	Jasmine, Asiatic	<i>Trachelospermum asiaticum</i>
Aucuba.	<i>Aucuba</i> spp.	Jasmine, Star	<i>Trachelospermum jasminoides</i>
Azalea*.	<i>Rhododendron</i> spp.	Juniper.	<i>Juniperus</i> spp.
Bamboo	<i>Bambusa</i> spp.	Lantana.	<i>Lantana</i> spp.
Barberry, Japanese	<i>Berberis thunbergii</i>	Nandina* Bamboo, Heavenly	<i>Nandinia domestica</i>
Barberry, Magellan	<i>Berberis buxifolia</i>	Oleander, Common	<i>Nerium oleander</i>
Bayberry	<i>Myrica pensylvanica</i>	Oregon Grape	<i>Mahonia aquifolium</i>
Bottlebrush	<i>Callistemon citrinus</i>	Photinia.	<i>Photinia</i> spp.
Boxwood, Common	<i>Buxus sempervirens</i>	Pittosporum	<i>Pittosporum</i> spp.
Camellia, Common	<i>Camellia japonica</i>	Podocarpus.	<i>Podocarpus</i> spp.
Candytuft	<i>Iberis sempervirens</i>	Privet.	<i>Ligustrum</i> spp.
Cleyera	<i>Cleyera japonica</i>	Pyracantha	<i>Pyracantha</i> spp.
Coralberry	<i>Ardisia crenata</i>	Rhododendron	<i>Rhododendron</i> spp.
Crape Myrtle	<i>Lagerstroemia indica</i>	Rose	<i>Rosa</i> spp.
Coyote Brush	<i>Baccharis pilularis</i>	Spirea	<i>Spiraea bumalda</i>
Fig, Creeping	<i>Ficus pumila</i>	Sweet Olive	<i>Osmanthus fragrans</i>
Gardenia	<i>Gardenia</i> spp.	Viburnum	<i>Viburnum tinus</i>
Holly.	<i>Ilex</i> spp.	Wisteria.	<i>Wisteria</i> spp.
Honeysuckle	<i>Lonicera</i> spp.	Yellow Sage/Shrub	<i>Lantana camara</i>
Indian Hawthorn	<i>Raphiolepis indica</i>	Verbena	

DIRECTIONS FOR ANNUAL GRASSES IN ORNAMENTALS

- Apply only to actively growing grasses at specified weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the specified growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

<u>GRASS SPECIES</u>	<u>SCIENTIFIC NAME</u>	<u>WEED** HEIGHT (inches)</u>	<u>APPLICATION RATES</u>	
			<u>MINIMUM RATE</u> fl. oz./A ⁽¹⁾	<u>MAXIMUM RATE</u> fl. oz./A ⁽²⁾
Barnyardgrass	<i>Echinochloa crus-galli</i>	2 to 8	12 (0.091 lb. a.i.)	32 (0.242 lb. a.i.)
Broadleaf Signaigrass	<i>Brachiaria platyphylla</i>	2 to 6	12	32
Brome				
California	<i>Bromus carinatus</i>	2 to 6	12	32
Cheat	<i>Bromus secalinus</i>	2 to 6	12	32
Downy	<i>Bromus tectorum</i>	2 to 6	12	32
Ripgut	<i>Bromus diandrus</i>	2 to 6	12	32
Canarygrass	<i>Phalaris canariensis</i>	1 to 4	12	32
Crabgrass				
Hairy	<i>Digitaria adscendens</i>	2 to 6***	12	32
Large	<i>Digitaria sanguinalis</i>	2 to 6***	12	32
Smooth	<i>Digitaria ischaemum</i>	2 to 6***	12	32
Southern	<i>Digitaria ciliaris</i>	2 to 6***	12	32
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	2 to 6***	12	32
Fall Panicum	<i>Panicum dichotomiflorum</i>	2 to 8	12	32
Field Sandbur	<i>Cenchrus incertus</i>	2 to 6	12	32
Foxtail				
Giant	<i>Setaria faberi</i>	2 to 12	12	32
Green	<i>Setaria vi ridis</i>	2 to 8	12	32
Yellow	<i>Setaria glauca</i>	2 to 8	12	32
Goosegrass	<i>Eleusine indica</i>	2 to 6***	12	32
Itchgrass	<i>Rottboellia cochlin</i>	2 to 6	12	32
Junglerice	<i>Echinochloa colona</i>	2 to 6	12	32
Lovegrass (Stinkgrass)	<i>Eragrostis cilianensis</i>	2 to 6	12	32
Rabbitsfootgrass	<i>Polypogon monspeliensis</i>	1 to 4	12	32
Red Rice	<i>Oryza sativa</i>	1 to 3	12	32
Rygrass				
Hardy	<i>Lolium remotum</i>	2 to 6	12	32
Italian*	<i>Lolium multiflorum</i>	2 to 6	12	32
Seedling Johnsongrass*	<i>Sorghum halepense</i>	4 to 10	12	32
Shattercane	<i>Sorghum bicolor</i>	6 to 18	12	32
Southwestern Cupgrass	<i>Eriochloa gracilis</i>	2 to 6	12	32
Sprangletop				
Amazon	<i>Leptochloa panicoides</i>	2 to 6	12	32
Bearded	<i>Leptochloa fascicularis</i>	2 to 6	12	32
Mexican	<i>Leptochloa uninervis</i>	2 to 6	12	32
Red	<i>Leptochloa fihiformis</i>	2 to 6	12	32
Texas Panicum	<i>Panicum texanum</i>	2 to 6	12	32
Volunteer Cereals				
Barley	<i>Hordeum vulgare</i>	2 to 6	12	32
Oats	<i>Avena sativa</i>	2 to 6	12	32
Rye	<i>Secale cereale</i>	2 to 6	12	32
Wheat	<i>Triticum aestivum</i>	2 to 6	12	32
Volunteer Corn	<i>Zea mays</i>	4 to 12	12	16
Volunteer Corn	<i>Zea mays</i>	12 to 24	12	32
Volunteer Grain Sorghum	<i>Sorghum bicolor</i>	8 to 12	12	32
Wild Oats	<i>Avena fatua</i>	2 to 6	12	32
Wild Proso Millet	<i>Panicum miliaceum</i>	2 to 10	12	32
Witchgrass	<i>Panicum capillare</i>	2 to 8	12	32
Woolly Cupgrass	<i>Eriochloa villosa</i>	2 to 8	12	32

*Non-ACC resistant

**Generally occurs between 3-leaf stage and tillering.

***Length of lateral growth.

(1)16 fl. oz./A = approximately 0.4 fl. oz./1000 sq. ft.

(2)32 fl. oz./A = approximately 0.8 fl. oz./1000 sq. ft.

Add non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v). Always use a CPDA Certified Adjuvant when possible.

DIRECTIONS FOR ANNUAL BLUEGRASS CONTROL WITH TAPOUT IN ORNAMENTALS			
GRASS SPECIES	WEED STAGE	APPLICATION RATES	
		MINIMUM RATE fl. oz./A	MAXIMUM RATE fl. oz./A
Annual Bluegrass (<i>Poa annua</i>)	To 4-leaf	<u>12</u> (0.091 lb. a.i.)	<u>32</u> (0.242 lb. a.i.)
Apply under favorable soil moisture and humidity that exists within a few days after rainfall or within 7 days after irrigation. Grass needs to be actively growing at time of application(s).			
Apply at weed stage indicated on the label, as reduced control can be expected with more mature annual bluegrass.			
Use the high rate under heavy grass pressure and/or when annual bluegrass is more mature.			
Add non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v).			

DIRECTIONS FOR PERENNIAL GRASSES IN ORNAMENTALS

- Apply only to actively growing grasses at specified weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the specified growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

GRASS SPECIES	WEED HEIGHT (inches)	APPLICATION RATES	
		MINIMUM RATE fl. oz./A⁽¹⁾	MAXIMUM RATE⁽²⁾ fl. oz./A
<i>Bermudagrass (Cynodon dactylon)</i> First Application Repeat Application(s) (if regrowth occurs)	3 (or up to 6'runners)	<u>12</u> (0.091 lb. a.i.)	<u>32</u> (0.242 lb. a.i.)
	3 (or up to 6' runners)	<u>12</u>	<u>32</u>
<i>Foxtail Barley (Hordeum jubatum)</i> First Application Repeat Application(s) (if regrowth occurs)	2 to 6	<u>12</u>	<u>32</u>
	2 to 6	<u>12</u>	<u>32</u>
<i>Quackgrass (Elytrigia repens)</i> First Application Repeat Application(s) (if regrowth occurs)	4 to 8	<u>12</u>	<u>32</u>
	4 to 8	<u>12</u>	<u>32</u>
<i>Rhizome Johnsongrass (Sorghum halepense)</i> First Application Repeat Application(s) (if regrowth occurs)	12 to 24	<u>2</u>	<u>32</u>
	6 to 18	<u>9</u> (0.068 lb. a.i.)	<u>16</u> (0.121 lb. a.i.)
<i>Wirestem Muhly (Muhlenbergia frondosa)</i> First Application Repeat Application(s) (if regrowth occurs)	4 to 8	<u>12</u>	<u>32</u>
	4 to 8	<u>12</u>	<u>32</u>

(1)16 fl. oz./A = approximately 0.3 fl. oz./000 sq. ft.

(2)32 fl. oz./A = approximately 0.8 fl. oz./1000 sq. ft.

Add non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v). Always use a CPDA Certified Adjuvant when possible.

IMPORTANT

Plant tolerance to **TAPOUT** at labeled rates has been found to be acceptable for the indicated genera and species listed below. Due to variability within species, crop growth stage, environmental conditions, and application techniques, it is recommended that the user determine if the herbicide can be used safely on a few plants prior to widespread application. Neither the seller nor the manufacturer of **TAPOUT** have investigated the safety factor to plants not listed on the label.

NON-BEARING FOOD CROPS

TAPOUT SHOULD NOT BE APPLIED TO NON-BEARING FRUIT OR NUT CROPS WHICH ARE GROWN FOR ROOT STOCK.

Crop injury to non-bearing fruit and nut crops can occur if TAPOUT is improperly applied. TAPOUT should not be applied directly over the top of these plant types. Instead spray should be directed at the base of the plant where grassy weeds are growing near the ground.

Non-bearing fruit and nut crops are plants which will not bear fruit or nuts for at least one year following **TAPOUT** application.

NON-BEARING FRUIT AND NUT CROPS SPECIFIC DIRECTIONS AND RESTRICTIONS FOR TAPOUT			
CROPS		Use Rates Per Acre	Special Use Instructions
COMMON NAME	SCIENTIFIC NAME		
Apples	<i>Milus spp</i>	9 -16 fl oz (0.068 to 0.121 lb ai)	Non-bearing fruit and nut crops are plants which will not bear fruit or nuts for at least one year following TAPOUT application. Use of crop oil concentrate may injure flowers and foliage. Sugar maples cannot be tapped for syrup within one year of TAPOUT application. For repeat application make on a minimum of a 14 day interval. Crop injury to non-bearing fruit and nut crops can occur if TAPOUT is improperly applied. TAPOUT must not be applied directly over the top of these plant types. Instead, direct spray at the base of the plant where grassy weeds are growing near the ground. Restrictions <ul style="list-style-type: none"> • If TAPOUT is applied as a spot treatment to non-bearing fruit and nut crops, DO NOT exceed the maximum rate allowed on a "per acre" basis. • TAPOUT must not be applied to non-bearing fruit or nut crops which are grown for root stock. • DO NOT apply more than 16 fl oz (0.121 lb ai) per acre per application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 64 fl oz (0.485 lb ai) per acre per year.
Berries	<i>Vaccinium spp.</i> <i>Rubus spp.</i>		
Cherry, Sweet	<i>Prunus avium</i>		
Citrus Fruits	<i>Citrus spp</i>		
Grapes	<i>Vitis spp</i>		
Olives	<i>Olea spp</i>		
Peach	<i>Prunus persica</i>		
Pears	<i>Pyrus communis</i>		
Prunes	<i>Prunus spp</i>		
Stone Fruits	<i>Prunus spp</i>		
Strawberries	<i>Fragaria spp.</i>		
Tree Nuts			
Almond	<i>Prunus triloba</i>		
Filbert	<i>Coryluss maxima</i>		
Pecan	<i>Carya illinoensis</i>		
Pistachio	<i>Pistacia vera</i>		
Walnut	<i>Juglans spp.</i>		

CONIFER TREES

TAPOUT can be used to control labeled grasses in Christmas tree farms, conifer nurseries and conifer plantations (but not in forests).

CONIFER TREES SPECIFIC DIRECTIONS AND RESTRICTIONS FOR TAPOUT			
CROPS		Use Rates Per Acre	Special Use Instructions
COMMON NAME	SCIENTIFIC NAME		
Arborvitae, American Cedars Cypress Fir, Douglas Firs Hemlock, Canadian/Eastern Hemlock, Western Pines Spruces Yew	<i>Thuja occidentalis</i> <i>Cedrus spp.</i> <i>Taxodium spp.</i> <i>Pseudotsuga menziesii</i> <i>Abies spp.</i> <i>Tsuga canadensis</i> <i>Tsuga heterophylla</i> <i>Pinus spp.</i> <i>Picea spp.</i> <i>Taxus spp.</i>	9-32 fl oz (0.068 to 0.242 lb ai)	<p>TAPOUT can be used to control labeled grasses in Christmas tree farms, conifer nurseries and conifer plantations (but not in forests).</p> <p>Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gals (0.25% v/v).</p> <p>For repeat application make on a minimum of a 14 day interval.</p> <p>Restrictions</p> <ul style="list-style-type: none"> • DO NOT apply more than 32 fl oz (0.242 lb ai) per acre per application. • DO NOT make more than 2 applications • at 32 fl oz (0.242 lb ai) or 4 applications at 16 fl oz (0.121 lb ai) or less per acre per year. • DO NOT apply more than 64 fl oz (0.485 lb ai) per acre per year.

NON-CROP OR NON-PLANTED AREAS

The following areas are considered non-crop or non-planted areas: Rights-of-way including railroads, highways, roads, dividers, medians, pipelines, public utility lines, pumping stations, transformer stations and substations. Around airports, electric utilities, commercial buildings, manufacturing plants, storage yards, rail yards, fence lines, parkways, and post-harvest croplands. Also beneath greenhouse benches and around golf courses.

DIRECTIONS FOR GRASS SUPPRESSION IN NON-CROP AREAS WITH TAPOUT			
GRASS SPECIES	WEED STAGE	APPLICATION RATES	
		MINIMUM RATE fl. oz/A	SPECIAL INSTRUCTIONS
Annual and perennial grasses that exceed height claimed for control on height chart above	Up to and including grasses in the seed head stage.	12 (0.091 lb. a.i.)	Add a crop oil concentrate at 1 qt/A by ground to the finished spray volume.
<p>Restrictions</p> <ul style="list-style-type: none"> • Other than the crop oil identified above, DO NOT apply as part of a tank mix when applying V-10137 1 EC Herbicide for grass suppression. • DO NOT apply more than 32 fl oz (0.242 lb ai) V-10137 1 EC Herbicide per acre per application. • DO NOT make more than 2 applications per acre per year. • For repeat applications make on a minimum of a 14 day interval. • DO NOT apply more than 64 fl oz (0.485 lb ai) V-10137 1 EC Herbicide per acre per year. 			

CONDITIONS OF SALE – LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions, the failure to follow the label directions, or good application practices, all of which are beyond the control of Helena Agri-Enterprises, LLC (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Agri-Enterprises, LLC's election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent consistent with applicable law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

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