



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

November 14, 2019

Katie Woodall
Agent for Prime Source, LLC
c/o Wagner Regulatory Associates, Inc.
P.O. Box 640
Hockessin, DE 19707

Subject: Registration Review Label Mitigation for Clethodim/Label Amendment – Label Amendment and Clethodim Registration Review
Product Name: PS Clethodim
EPA Registration Number: 89442-4
Application Date: 11/14/2019
Decision Numbers: 557140, 557136

Dear Ms. Woodall:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of 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 agency also completed review of your amended label referred to above, submitted in connection with registration under FIFRA, as amended, and has determined the label is also 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. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Marc Sheahin by phone at 703-347-8639 or via email at sheahin.marc@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Erik Kraft". The signature is fluid and cursive, with the first name "Erik" being more legible than the last name "Kraft".

Erik Kraft, Product Manager 24
Fungicide and Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Enclosure

CLETHODIM

GROUP

1

HERBICIDE

[Master Label]

PS Clethodim

[Herbicide]

| | |
|---------------------------------|---------------|
| ACTIVE INGREDIENT: | By Wt. |
| *Clethodim | 26.4% |
| OTHER INGREDIENTS: | <u>73.6%</u> |
| 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 2.0 lbs. clethodim per gallon.

KEEP OUT OF REACH OF CHILDREN WARNING – AVISO

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

| FIRST AID | |
|---|--|
| 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 for treatment advice. |
| IF ON SKIN OR CLOTHING: | <ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. |
| IF SWALLOWED: | <ul style="list-style-type: none"> Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person. |
| IF INHALED: | <ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by 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. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 a.m. to 4:30 p.m. Pacific Time or your poison control center at 1-800-222-1222 . | |
| 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. | |

[Optional referral statements when booklets and container labels are used:]

[See label booklet for [complete] [additional] [First Aid,] [Precautionary Statements,] [Directions For Use,] and [Storage and Disposal.]

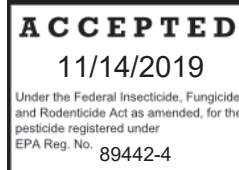
EPA Reg. No. 89442-4**Manufactured For:**

Prime Source, LLC

P.O. Box 250

10025 Hwy. 264 Alternate

Middlesex, NC 27557

EPA Est. No.**Net Contents:** _____ [Gals./Liters]

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

Causes substantial but temporary eye irritation. Avoid contact with skin. Do not get in eyes, on skin or on clothing. Harmful if swallowed or inhaled. Avoid breathing vapors or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants, chemical-resistant gloves including Barrier Laminate or Viton \geq 14 mils, shoes plus socks, and 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 no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, 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, 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.

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 are 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.

NON-TARGET ORGANISM ADVISORY

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

PHYSICAL OR CHEMICAL HAZARDS

Combustible. 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 THE ENTIRE LABEL. 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, including plants, soil, or water, is: coveralls, chemical-resistant gloves, including Barrier Laminate or Viton \geq 14 mils, shoes plus socks, and protective eyewear.

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, forest, 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.

RESISTANCE MANAGEMENT

PS Clethodim contains clethodim and is classified in the cyclohexanedione chemical group as a Group 1 herbicide, accase inhibitors. Herbicide resistance is defined as the inherited ability of a plant to survive and reproduce following exposure to a dose of herbicide normally lethal to the wild type. In a plant, resistance may be naturally occurring or induced by such techniques as genetic engineering or selection of variants produced by tissue culture or mutagenesis. Any weed population may contain or develop plants that are naturally resistant to PS Clethodim and other Group 1 herbicides. Weed species with acquired resistance to Group 1 herbicides may eventually dominate the weed population if Group 1 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by PS Clethodim or other Group 1 herbicides.

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

- 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.

- Report any incidence of non-performance of this product against a particular weed species to your Prime Source, LLC retailer, representative or call (252) 235-0043.
- Monitor treated weed populations for loss of field efficacy.
- Scout field(s) before and after application.

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.

Contact your local sales representative, extension agent, or certified crop advisors 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 action for each target weed.

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.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. 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 year;
7. Rain free period required; or
8. Application timing (e.g. pre-harvest interval)
9. Do not exceed the total yearly rates.

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

PRODUCT INFORMATION

RESTRICTIONS

- **Long Island, New York: DO NOT** apply more than 16 fl. oz. of PS Clethodim (0.25 lb. a.i.) per acre per season.
- **DO NOT** apply if rain is expected within 1 hour of application as control may be unsatisfactory.
- **DO NOT** apply a postemergence broadleaf herbicide within one day following application of PS Clethodim or reduced grass control may result.
- **DO NOT** apply under conditions of stress. Applying PS Clethodim 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 PS Clethodim effectively, and will be less susceptible to herbicide activity.
- **DO NOT** allow PS Clethodim to come in contact with desirable grass crops including corn, rice, sorghum, small grains, or turf, as these and other grass crops will be injured or killed. Minor leaf spotting may occur on treated plants under certain environmental conditions. New foliage is not affected.
- Aerial applications for all tree fruits and tree nuts uses are prohibited.

ROTATIONAL RESTRICTIONS

- **DO NOT** plant rotational crops until 30 days after application of PS Clethodim unless the crop is listed on PS Clethodim label.

PRECAUTIONS

- Grass crops including corn, rice, sorghum, small grains, or turf, etc. are highly sensitive to PS Clethodim.
- PS Clethodim may not be used on vegetable crops being grown for seed production unless specific use directions are provided.
- PS Clethodim is a selective postemergence herbicide for control of annual and perennial grasses.
- PS Clethodim does not control sedges or broadleaf weeds.
- Optimal perennial grass control can be obtained if rhizomes or stolons are cut up by preplant tillage practices, (discing, 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, result in a very staggered, non-uniform weed emergence. Due to this non-uniform weed emergence, no fewer than 2 PS Clethodim applications per year are specified at the appropriate weed-growth stage rate under continuous no-till conditions.
- While all the vegetable crops on this label have been tested for crop safety with PS Clethodim, not all specialty varieties of these crops have been tested. It is advised that, before applying PS Clethodim to specialty varieties of vegetable crops on this label, first apply a small section of the field to evaluate potential injury. Injury symptoms may appear as leaf speckling or stunting.
- It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
- Tank mixes of PS Clethodim and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs, an additional application PS Clethodim may be necessary. **AVOID SPRAY DRIFT.**
- Repeated use of PS Clethodim (or similar postemergence grass herbicides with the same mode of action) may lead to the selection of naturally occurring biotypes that are resistant to these products in some grass species.
- If poor performance occurs and cannot be attributed to adverse weather or application conditions, a resistant biotype may be present. This is most likely to occur in fields where other control strategies such as crop rotation, mechanical removal, and other classes of herbicides are not used from year to year.

PS Clethodim is not directed for use on vegetable crops being grown for seed production unless specific use directions are provided.

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

Repeated use of PS Clethodim (or similar postemergence grass herbicides with the same mode of action) may lead to the selection of naturally occurring biotypes that are resistant to these products in some grass species. If poor performance occurs and cannot be attributed to adverse weather or application conditions, a resistant biotype may be present. This is most likely to occur in fields where other control strategies including crop rotation, mechanical removal, and other classes of herbicides are not used from year to year.

APPLICATION INFORMATION

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.

Timing of Applications

Apply PS Clethodim postemergence to actively growing grasses according to rate table instructions. Applications made to grass plants stressed by insufficient moisture, or hot or cold temperatures, or to grass

plants exceeding listed growth stages may result in unsatisfactory control. **DO NOT** apply under these conditions.

In arid regions where irrigation is used to supplement limited rainfall, PS Clethodim must be applied as soon as possible, after irrigation (within 7 days). In arid regions, a second application of PS Clethodim 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 PS Clethodim may reduce weed control. **DO NOT** APPLY PS Clethodim if rainfall is expected within one hour, since control may be reduced.

ADDITION OF ADJUVANT OR CROP OIL CONCENTRATE

| CROP | ADJUVANT USE INSTRUCTIONS |
|---|--|
| Alfalfa, Cotton, Legume Vegetables (Succulent & Dried) – Crop Group 6, Peanuts (including perennial), Potato, Soybean, Sugar Beet, and Sunflower – Subgroup 20B. | Always use a crop oil concentrate* at 1.0 qt./A by ground or 1% v/v (but not less than 1 pt./A) in the finished spray volume by air. 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N or 32%N), or an equivalent amount (2.5 to 4.0 lbs./A) of spray grade ammonium sulfate (AMS) may be added to PS Clethodim applications, in addition to the specified rate of crop oil concentrate. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn. |
| Artichoke (Globe), Berry (low-growing) – Subgroup 13-07G (except cranberry), Brassica Head & Stem Vegetables – Crop Group 5-16, Brassica Leafy Greens – Subgroup 4-16B, Bushberry – Subgroup 13-07B, Caneberry – Subgroup 13-07A, Canola, Clover, Cranberry, Flax, Fruiting Vegetables – Group 8-10 (except Okra and Tomato), Garden Beet, Herbs – Subgroup 19A, Hops, Leafy Greens – Subgroup 4-16A, Leaf Petioles Vegetable – Subgroup 22B, Melon – Subgroup 9A, Mustard Seed, Okra, Onion (Bulb) – Subgroup 3-07A, Onion (Green) – Subgroup 3-07B, Peppermint and Spearmint tops, Pome Fruit – Crop Group 11-10, Radish, Rapeseed -Subgroup 20A (except flax seed), Root Vegetables – Subgroup 1B (except sugar beet), Safflower, Squash/cucumber – Subgroup 9B, Stalk and Stem Vegetable – Subgroup 22A, Stevia (dried leaves), Stone Fruit – Crop Group 12-12, Tuberous and Corm Vegetable – Subgroup 1C, and Tree Nuts – Crop Group 14-12 | Always use a crop oil concentrate at 1% v/v in the finished spray volume unless tank mix instructions indicate otherwise. Addition of liquid fertilizer is not advised for these crops. |
| Non-Bearing Food Crops, Ornamental Plants | Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v). Use of crop oil concentrate is not advised since it may injure flowers and foliage. |

| | |
|--|--|
| Conifer Trees, Fallow Land (and other non- producing agricultural areas), and Non-Crop or Non-Planted Areas | Always use a crop oil concentrate containing at least 15% emulsifier at 1% v/v (but not less than 1 pt./A) in the finished spray volume. |
|--|--|

*Acceptable crop oil concentrates would be those that contain a minimum of 80% oils and 15% emulsifier. 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.

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 must reflect a minimum of 30 psi and a maximum of 60 psi at the nozzle. **DO NOT** use flood nozzles.

Applications to onions (dry bulbs and green), garlic, and shallots (dry bulbs and green) must 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 onions (dry bulbs and green), garlic, or shallots (dry bulbs and green): When applying by air **DO NOT** exceed 8 fl. oz./A (0.125 lb. a.i./A) in a single application. In California, air applications to onions, garlic or shallots must be made in a minimum of 20 gals. of spray solution per acre. In states other than California, air application to onions, garlic, or shallots must be made in a minimum of 10 gals. of spray solution per acre.

NOTE: Crop injury may occur when PS Clethodim is applied to onions, garlic or shallots with aerial equipment.

Spot Treatment

When using hand sprayers or high volume sprayers utilizing hand guns, mix 1/4% to 1/2% (0.33 oz. to 0.65 oz. per gal.) PS Clethodim 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 non-ionic surfactant, include non-ionic surfactant at 1.4% (0.33 oz. per gal.) by volume.

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

CHEMIGATION – ONION (Dry Bulb and Green) AND GARLIC SPRINKLER IRRIGATION APPLICATION

Only apply PS Clethodim by chemigation to Onions (dry bulb and green) and Garlic Crops.

May be applied to onions and garlic by sprinkler irrigation systems.

Apply PS Clethodim at the high rate specified for annual grasses (16 fl. oz. per acre (0.25 lb. a.i.)) when the grass height is at the low end of the range (application to larger grasses may not provide adequate control). Add a crop concentrate containing at least 15% emulsifier at 1 quart per acre.

Apply PS Clethodim 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 PS Clethodim 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 advised that PS Clethodim 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.

PRECAUTIONS

- Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, travelers, big gun, solid set, or hand move.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from non-uniform distribution of treated water.
- If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

RESTRICTIONS

- **DO NOT apply PS Clethodim by chemigation in the states of Idaho, Montana, Oregon, and Washington.**
- **DO NOT** apply this product through any 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.
- **DO NOT** apply by chemigation to any other crop, or to this crop using any other type of irrigation system.
- **DO NOT** apply this product through any other type of irrigation system (i.e. Public Irrigation System).
- **DO NOT** connect to 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.
- A person knowledgeable of the chemigation system and responsible for its operation or under supervision of the responsible person, must shut the system down and make necessary adjustments should the need arise.
- 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.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 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.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 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.
- Systems must use a metering pump, including 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.
- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

MANDATORY SPRAY DRIFT

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 S.572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applications must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed towards the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperatures 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 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 nozzle designed to reduce drift.

Control 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 be 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 later 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.

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

PRODUCT LIMITATIONS

PS Clethodim is not advised for use on vegetable crops being grown for seed production unless specific use directions are provided.

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

Grass crops including corn, rice, sorghum, small grains, or turf, etc. are highly sensitive to PS Clethodim. While all the vegetable crops on this label have been tested and are resistant to PS Clethodim, not all specialty varieties of these crops have been tested. It is advised that, before applying PS Clethodim to specialty varieties of vegetable crops on this label, crop resistance 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 rotational and other crop restrictions.

Tank mixes of PS Clethodim and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs, an additional application of PS Clethodim may be necessary. **AVOID SPRAY DRIFT.**

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR PS CLETHODIM

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|---|---|--|--|--|
| Alfalfa including: Sainfoin Holy Clover Birdsfoot trefoil ⁽³⁾ | 15 days before grazing, feeding or harvesting (cutting) for forage or hay | 6-16 fl. oz. ⁽⁴⁾ (0.094-0.25 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | For repeat applications, make on a minimum of a 14 day interval. Refer to tank mix partners for feeding, grazing and harvesting restrictions. ^(5,6) The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn. Restrictions: <ul style="list-style-type: none"> DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) per application. |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|--|--|--------------------------------------|--|--|
| | | | | <ul style="list-style-type: none"> • DO NOT make more than 4 applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at the highest rate, 16 oz. fl. (0.25 lb. a.i./A) per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Artichoke (Globe) | 5 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14-day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Bean, Dry except Soybean [Dried Shelled Pea and Bean (except soybean) Subgroup 6C] 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, | 30 days | 6-16 fl. oz. (0.094-0.25 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | <p>For repeat applications make on a minimum of 14-day interval.</p> <p>Refer to appropriate Table for reduced rate directions for the control of small annual grasses.</p> <p>The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) per application. • DO NOT make more than 4 applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at 16 fl. oz./A (0.25 lb. a.i./A) per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • For Reduced Rate Control for Small Annual Grasses: |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|--|--|---------------------------------------|--|--|
| Lentil | | | | DO NOT make more than 8 applications at 4 fl. oz./A (0.0625 lb. a.i./A) per year. |
| Bean, Succulent Shelled [Succulent Shelled Pea and Bean Subgroup 6B] 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 | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | Refer to appropriate Table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application. • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per year. • DO NOT apply more than one (1) application per acre per year. • For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 2 applications at 4 fl. oz./A (0.0625 lb. a.i./A) per year. |
| Beet, Garden | 30 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | For repeat applications make on a minimum of a 14-day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.500 lb. a.i./A) per year. |
| Berry Low Growing (except Cranberry and Strawberry) [Subgroup 13-07G] including: Bearberry Bilberry Blueberry, lowbush Cloudberry Lingonberry | 45 days | 4-8 fl. oz. (0.0625-0.125 lb. a.i./A) | Non-ionic surfactant (NIS) at 0.25% v/v. | For repeat applications make on a minimum of a 14 day interval. Verify crop safety to PS Clethodim on a small area of the crop, at the desired PS Clethodim rate and with the same non-ionic surfactant (NIS) that will be used on the field. If no crop response is evident 7 days after treatment, PS Clethodim may |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|---|--|--------------------------------------|--|---|
| Muntries Partridgeberry | | | | <p>be used on the entire field at the rate tested and with the same NIS used in the crop safety test.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Brassica Head & Stem Vegetable [Crop Group 5-16][*] including: Broccoli Brussels sprouts Cabbage Cabbage, Chinese (napa) Cauliflower Cultivars, varieties and/or hybrids of these commodities. | 30 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14-day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT apply more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.500 lb. a.i./A) per year. |
| Brassica Leafy Greens (except Radish Leaves, Turnip Greens and Watercress) [Subgroup 4-16B][*] including: Arugula Broccoli, Chinese Broccoli Raab Cabbage, Abyssinian Cabbage, Chinese (bok choy) Cabbage, Seakale Collards Cress, Garden Cress, Upland Hanover Salad Kale Maca (leaves) Mizuna Mustard Greens Rape Greens Rocket, Wild Shepherd's Purse | 14 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application. • DO NOT apply more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|--|--|--------------------------------------|--|--|
| cultivars, varieties, and/or hybrids of these commodities | | | | |
| Bushberry [Subgroup 13-07B] , 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 Native currant Salal Sea Buckthorn Cultivars, varieties and/or hybrids of these. | 14 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | For repeat applications make on a minimum of a 14-day interval. Apply at the base of the plant where grassy weeds are growing near the ground. Restrictions: <ul style="list-style-type: none"> • DO NOT apply to low growing berries. • DO NOT apply to Bushberry grown for root stock. • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • DO NOT apply more than 4 applications per acre per year. |
| Caneberry [Subgroup 13-07A] , including: Blackberry Loganberry Raspberry, black Raspberry, red Raspberry, wild Cultivars, varieties and/or hybrids of these. | 7 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | For repeat applications make on a minimum of a 14-day interval. Apply at the base of the plant where grassy weeds are growing near the ground. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT apply more than 4 applications when using 8 fl. oz./A (0.125 lb. a.i./A) per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • DO NOT apply to low growing berries. • DO NOT apply to Caneberry grown for root stock. |
| Canola (except flax seed, mustard seed and sesame seed) | 70 days | 4-6 fl. oz. (0.0625-0.094 lb. | 1% v/v in the finished spray volume. | Verify crop safety to PS Clethodim on a small area of the crop, at the desired PS Clethodim rate and with |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|--|--|--------------------------------------|--|--|
| <p>[Rapeseed Subgroup 20A][*] Including: Borage Crambe Cuphea Echium Gold of Pleasure (Camelina) Hare's Ear Mustard Lesquerella Lunaria Meadowfoam Milkweed Oil Radish Poppy seed Rapeseed (canola) Sweet Rocket Cultivars, varieties, and/or hybrids of these.</p> | | a.i./A) | | <p>the same non-ionic surfactant (NIS) that will be used on the field. If no crop response is evident 7 days after treatment, PS Clethodim may be used on the entire field at the rate tested and with the same NIS used in the crop safety test.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply after crop has begun bolting. Crop injury may occur when PS Clethodim is applied during the bloom period. • DO NOT apply more than 6 fl. oz./A (0.094 lb. a.i./A) in a single application. • For Annual and Perennial Grasses: DO NOT make more than 1 application at 6 fl. oz./A (0.094 lb. a.i./A) in a year. • For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 1 application at 4 fl. oz./A (0.0625 lb. a.i./A) per year. |
| Carrot | 30 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14-day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Clover | 15 days before grazing, feeding, or harvesting (cutting) for forage or hay | 6-16 fl. oz. (0.094-0.25 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For use on clover grown in the states of Idaho, Oregon and Washington only.</p> <p>For repeat applications, make on a minimum of a 14 day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) per application. • DO NOT make more than 2 |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|---|--|--------------------------------------|--|---|
| | | | | <p>applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 1 application at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per acre per year.</p> <ul style="list-style-type: none"> • DO NOT exceed 16 fl. oz/A (0.25 lb. a.i./A) in a year. |
| <p>Corn, Field For burndown of existing stand of Roundup Ready field corn or volunteer Roundup Ready field corn prior to replanting field corn. See Directions for Use in Roundup Ready Field Corn (Burndown) table.</p> | 90 days | 3 fl. oz. (0.047 lb. a.i./A) | Do not use COC or MSO with PS Clethodim in this use pattern. | <p>To control the existing stand, replant no sooner than 6 days after application.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 3 fl. oz./A (0.047 lb. a.i./A) per application. • DO NOT make more than 1 application per year. • DO NOT apply more than 3 fl. oz./A (0.047 lb. a.i./A) per year. |
| <p>Cotton (including cotton grown for seed) [Cottonseed Subgroup 20C] including: Cottonseed Cultivars, varieties, and/or hybrids of these.</p> | 60 days | 6-16 fl. oz. (0.094-0.25 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | <p>The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) per application. • DO NOT make more than 4 applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • DO NOT graze treated fields or feed treated forage or hay to livestock. |
| <p>Cranberry</p> | 30 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14-day interval.</p> <p>Restrictions:</p> |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|--|--|--------------------------------------|--|---|
| | | | | <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz. (0.5 lb. a.i./A) per year. • DO NOT apply between the “hook” stage and full fruit set. |
| Fallow Land Conifer Trees (and other non-producing agricultural areas) Non-Crop or Non-Planted Areas | N/A | 6-16 fl. oz. (0.094-0.25 lb. a.i./A) | 1% v/v (but not less than 1 pt./A) in the finished spray volume using a crop oil concentrate containing at least 15% emulsifier. | <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) per application. • DO NOT make more than 4 applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A) per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • DO NOT plant any crop for 30 days after application unless clethodim is registered for use in that crop. |
| Flax [*] | 60 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>Apply prior to bloom. Crop injury may occur when PS Clethodim is applied during the bloom period.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 2 applications per acre per year. • DO NOT exceed 16 fl. oz./A (0.25 lb. a.i./A) in a year. • For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 4 applications at 4 fl. oz./A |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|---|--|--------------------------------------|--|---|
| Fruiting Vegetable (except Okra and Tomato) [Crop Group 8-10] including: African Eggplant Bush Tomato Bell Pepper Cocona Currant Tomato Eggplant Garden Huckleberry Goji Berry Groundcherry Martynia Naranjilla Pea Eggplant Pepino Nonbell Pepper Roselle Scarlet Eggplant Sunberry Tomatillo Tree Tomato Cultivars, varieties, and/or hybrids of these. | 20 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | (0.0625 lb. a.i./A) per year. For repeat applications make on a minimum of a 14-day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Herbs [Subgroup 19A] including: Angelica Balm Basil Borage Burnet Camomile Catnip Chervil (dried) Chive Chive, Chinese Clary Coriander (leaf) Costmary, Cilantro (leaf) Curry (leaf), Dill (dillweed) Horehound Hyssop Lavender Lemongrass Lovage (leaf) Marigold Marjoram (<i>Origanum</i> spp.) | 14 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | PS Clethodim has not been tested on all herbs, and herb varieties. It is the responsibility of the user to test PS Clethodim on a small portion of the crop to be treated before treating the entire field. Crop resistance must be verified to PS Clethodim on a small area of the herb crop, at the desired PS Clethodim 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, PS Clethodim may be used on the entire field at the rate tested and with the same crop oil used in the resistance test. For repeat applications make on a minimum of a 14-day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|--|--|--------------------------------------|--|---|
| Nasturtium Parsley (dried) Pennyroyal Rosemary Rue Sage Savory, Summer and Winter Sweet Bay Tansy Tarragon Thyme Wintergreen Woodruff Wormwood | | | | <p>single application.</p> <ul style="list-style-type: none"> • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per acre per year. |
| Hops | 21 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14-day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per acre per year. |
| Leaf Petioles Vegetables [Subgroup 22B][*] including: Cardoon Celery Celtuce Chinese Celery Fuki Fennel, Florence (finochio) Rhubarb Udo Zuiki Swiss Chard Cultivars, varieties, and/or hybrids of these commodities. | 30 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14-day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per acre |
| Leafy Greens [Subgroup 4-16A][*] including: Amaranth Chinese Spinach Leafy Amaranth Tampala | 14 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14-day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|--|--|--------------------------------------|--|---|
| 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 New Zealand Vine (Indian and malabar) | | | | <ul style="list-style-type: none"> • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per acre |
| Legume Vegetables, Edible Podded [Subgroup 6A] 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 | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | For peas apply before bloom, but no later than 21 days before harvest. Refer to appropriate Table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 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 8 fl. oz./A (0.125 lb. a.i./A) per year. • For Reduced Rate Control for Small Annual Grasses: |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|---|--|---|---|--|
| | | | | DO NOT make more than 2 applications at 4 fl. oz./A (0.0625 lb. a.i./A) per year. |
| Melon [Subgroup 9A] including: Citron melon Muskmelon (including Cantaloupe, honeydew) Melon Watermelon | 14 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | For repeat applications make on a minimum of a 14 day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Mint (peppermint & spearmint tops) | 21 days | 6-16 fl. oz. ⁽⁴⁾ (0.094-0.25 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. | For repeat applications make on a minimum of a 14-day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) in a single application. • DO NOT make more than 4 applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i.) per year. |
| Mustard Seed [*] | 75 days | 4-6 fl. oz. (0.0625-0.094 lb. a.i./A) | 1% v/v in the finished spray volume. | For repeat applications, make on a minimum of a 14 day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply after crop has begun bolting. Crop injury may occur when PS Clethodim is applied during the bloom period. • DO NOT apply more than 6 fl. oz./A (0.094 lb. a.i./A) in a single application. • DO NOT make more than 2 applications per acre per year. • DO NOT exceed 12 fl. oz./A (0.188 lb. a.i./A) in a year. • For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 3 |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
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| | | | | applications at 4 fl. oz./A (0.0625 lb. a.i./A) per year |
| Okra [*] | 3 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| <p>[Bulb Onion] [Subgroup 3-07A] Including: Onion (Dry Bulb Only) Including: Daylily, Bulb Fritillaria, Bulb Garlic, bulb Garlic, Great-headed, bulb Garlic, Serpent, Bulb Lily, Bulb Onion, Bulb Onion, Chinese, Bulb Onion, Pearl Onion, Potato, Bulb Shallot (Dry Bulb Only) Cultivars, varieties, and/or hybrids of these.</p> | 45 days | 6-16 fl. oz. (0.094-0.25 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14 day interval.</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.⁽⁹⁾</p> <p>In states other than California, air application to onions, garlic or shallots must be made in a minimum of 10 gals./A.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) per application. • DO NOT make more than 2 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • When applying by air, DO NOT exceed 8 fl. oz./A (0.125 lb. a.i./A) per application and 16 fl. oz./A (0.25 lb. a.i./A) per year. • If PS Clethodim is applied as a spot treatment to onion or garlic, DO NOT exceed the maximum rate allowed on a "per acre" basis. • In California, DO NOT apply PS Clethodim to garlic or onion until the crop has at |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|---|--|--------------------------------------|--|---|
| | | | | <p>least two full leaves. Use a 14 day spray interval between the application of PS Clethodim and liquid nitrogen or other herbicide applications. Injury to crop may occur when shorter intervals are observed.</p> <ul style="list-style-type: none"> In California, for air applications to onion, DO NOT exceed 2 applications per year. <p>For Garlic or Shallot:</p> <ul style="list-style-type: none"> When applying by ground, DO NOT exceed 8 fl. oz./A (0.125 lb. a.i./A) per application or 16 fl. oz./A (0.25 lb. a.i./A) per year. DO NOT exceed 2 applications per year. |
| <p>Onion, Green [Subgroup 3-07B][*] including: Chive (fresh leaves) Chive, Chinese (fresh leaves) Elegans Hosta Fritillaria (leaves) Kurrat Lady's Leek Leek Leek, Wild Onion, Beltsville (bunching) Onion (fresh) Onion, Green Onion, Marcostem Onion, Macrostem Onion, Tree (tops) Onion, Welsh (tops) Shallot (fresh leaves) Cultivars, varieties, and/or hybrids of these commodities.</p> | 14 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14-day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. DO NOT make more than 4 applications per acre per year. DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. For air applications to onion, DO NOT exceed 8 fl. oz./A (0.125 lb. a.i./A) per application. In California for air applications to onion, DO NOT exceed 2 applications per year. If PS Clethodim is applied as a spot treatment to onion or garlic, DO NOT exceed the maximum rate allowed on a "per acre" basis. In California, DO NOT apply PS Clethodim to onion or garlic until the crop has at least two full leaves. Use a 14 day spray interval |

| Crops⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre⁽²⁾ | Special Use Instructions |
|--|---|--|---|--|
| | | | | between the application of PS Clethodim and liquid nitrogen or other herbicide applications. Injury to crop may occur when shorter intervals are observed. |
| Ornamentals Non-Bearing Food Crops | N/A N/A | 6-16 fl. oz. (0.094-0.25 lb. a.i.) 6-8 fl. oz. (0.094-0.125 lb. a.i.) | Use of crop oil concentrate is not advised since it may injure flowers and foliage. See Special Use Instructions. | For repeat applications, make on a minimum of a 14 day interval. Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v). Restrictions: <ul style="list-style-type: none"> • For Ornamentals, DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) in a single application. • For non-bearing food crops, DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • DO NOT apply more than 4 applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per year. • Sugar maples cannot be tapped for syrup within one year of PS Clethodim application. • If applying as a spot treatment to non-bearing food crops, DO NOT exceed the maximum rate allowed on a “per acre” basic. |
| Pea, Dry Shelled [Dry Shelled Pea and Bean (except Soybean) Subgroup 6C] including: Pea (<i>Pisum</i> spp.) Field Pigeon | 30 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | Apply before bloom but not later than 30 days prior to harvest. Applications of PS Clethodim to peas during the bloom period could result in severe crop injury, including loss of yield and delayed maturity. Refer to appropriate Table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
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| | | | | <p>improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn.</p> <p>Applications of PS Clethodim to peas during the bloom period could result in severe crop injury, including loss of yield and delayed maturity.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application. • DO NOT apply more than one (1) application per acre per year. • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per year. • For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 2 applications at 4 fl. oz./A (0.0625 lb. a.i./A) p per year. |
| <p>Pea, Succulent [Succulent Shelled Pea and Bean Subgroup 6B] including: Pea (<i>Pisum</i> spp.) English Pea Garden Pea Green Pea Pigeon Pea</p> | 21 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | <p>Apply before bloom but not later than 21 days prior to harvest. Applications of PS Clethodim to peas during the bloom period could result in severe crop injury, including loss of yield and delayed maturity.</p> <p>Refer to appropriate Table for reduced rate directions for the control of small annual grasses.</p> <p>The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application. • DO NOT apply more than one (1) application per acre per year. • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|---|--|---------------------------------------|--|---|
| | | | | <p>year.</p> <ul style="list-style-type: none"> For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 2 applications at 4 fl. oz./A (0.625 lb. a.i./A) per year. |
| Peanut (including Perennial) | 40 days | 6-16 fl. oz. (0.094-0.25 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | <p>The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>For repeat applications, make on a minimum of a 14 day interval.</p> <p>Restrictions</p> <ul style="list-style-type: none"> DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) per application. DO NOT make more than 4 applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per acre per year. DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Pome Fruit [Crop Group 11-10] including: Apple Azarole Crabapple Loquat Mayhaw Hook. & Arn., and C. <i>rulula</i> Sarg. Medlar Pear Pear, Asian Pseudocydonia <i>sinensis</i> Quince Quince, Chinese Quince, Japanese Tejocote Cultivars, varieties and/or hybrids of these. | 14 days | 4-8 fl. oz. (0.0625-0.125 lb. a.i./A) | Non-ionic surfactant (NIS) at 0.25% v/v | <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application. DO NOT make more than 4 applications per acre per year. DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Potato | 30 days | 6-16 fl. oz. | 1 qt. by | For repeat applications make on a |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
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| | | (0.094-0.25 lb. a.i./A) | ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | <p>minimum of a 14 day interval.</p> <p>The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) per application. • DO NOT make more than 4 applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Radish Radish Leaves | 15 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14-day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 2 applications per acre per year. • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i.) per acre in a year. |
| Root Vegetable (except Sugar Beet Radish) [Subgroup 1B] , including: Burdock, Edible Celeriac Chervil, Turnip Rooted Chicory Ginseng Horseradish Parsley, Turnip Rooted Parsnip Radish, Oriental Rutabaga Salsify | 30 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14-day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|---|--|--|--|--|
| Salsify, Black Salsify, Spanish Skirret Turnip | | | | |
| Safflower | 70 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | For repeat applications make on a minimum of a 14-day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Sesame | 14 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | For repeat applications make on a minimum of a 14-day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • DO NOT apply during flowering. |
| Soybean | 60 days | 6-16 fl. oz. (0.094-0.25 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | For repeat applications make on a minimum of a 14-day interval. Refer to appropriate Table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) in a single application. • DO NOT make more than 4 applications at the lowest |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|--|--|--------------------------------------|--|---|
| | | | | <p>rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per acre per year.</p> <ul style="list-style-type: none"> • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • DO NOT graze treated fields or feed treated forage or hay to livestock. • For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 8 applications at 4 fl. oz./A (0.0625 lb. a.i./A) per year. |
| <p>Squash/Cucumber [Subgroup 9B] including: Chayote (fruit) Chinese waxgourd (Chinese preserving melon) Cucumber Gherkin Gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra) Momordica spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber) Pumpkin Squash, Summer Squash, Winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash)</p> | 14 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| <p>Stalk and Stem Vegetable [Subgroup 22A][*] Agave Aloe Vera Asparagus Bamboo Shoots</p> | 1 day | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application. |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
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| Celtuce Fennel, Florence (fresh leaves and stalk) Fern, Fiddlehead (edible) Kale, Sea Kohlrabi Palm Hearts Prickly Pear (pads) Prickly Pear, Texas (pads) cultivars, varieties, and/or hybrids of these commodities | | | | <ul style="list-style-type: none"> • DO NOT make more than 2 applications per acre per year. • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) per year. |
| Stevia, dried leaves | 14 days | 4-8 fl. oz. (0.0625-0.125 lb. a.i./A) | Non-ionic Surfactant (NIS) at 0.25% v/v. | <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>PS Clethodim has not been tested on all varieties. It is the responsibility of the user to test PS Clethodim on a small portion of the crop to be treated before treating the entire field.</p> <p>Verify crop safety to PS Clethodim on a small area of the crop, at the desired PS Clethodim rate and with the same non-ionic surfactant (NIS) that will be used on the field. If no crop response is evident 7 days after treatment, PS Clethodim may be used on the entire field at the rate tested and with the same NIS used in the crop safety test.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Stone Fruit [Crop Group 12-12] including: Apricot Apricot, Japanese Capulin Cherry, Black | 14 days | 4-8 fl. oz. (0.0625-0.125 lb. a.i./A) | Non-ionic Surfactant (NIS) at 0.25% v/v. | <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application. |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|--|--|--|--|---|
| Cherry, Nanking Cherry, Sweet Cherry, Tart; Jujube, Chinese Nectarine Peach Plum Plum, American Plum, Beach Plum, Canada Plum, Cherry Plum, Chickasaw Plum, Damson Plum, Japanese; Plum, Klamath Plum, Prune Plumcot Sloe Cultivars, varieties, and/or hybrids of these. | | | | <ul style="list-style-type: none"> • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Strawberry | 4 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | For repeat applications make on a minimum of a 14-day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Sugar Beet | 40 days | 6-16 fl. oz. (0.094-0.25 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | For repeat applications make on a minimum of a 14 day interval. Refer to appropriate Table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) in a single application. • DO NOT make more than 4 |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|--|--|--------------------------------------|--|---|
| | | | | <p>applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A) , or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per acre per year.</p> <ul style="list-style-type: none"> • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 8 applications at 4 fl. oz./A (0.0625 lb. a.i./A) per year. |
| <p>Sunflower [Subgroup 20B] including: Calendula Castor oil Plant Chinese Tallowtree Euphorbia Evening Primrose Jojoba Niger Seed Rose Hip Stokes Aster Tallowwood Tea Oil Plant Vernonia Cultivars, varieties, and/or hybrids of these.</p> | 70 days | 6-16 fl. oz. (0.094-0.25 lb. a.i./A) | 1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁽⁵⁾ | <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Verify crop safety to PS Clethodim on a small area of the crop, at the desired PS Clethodim rate and with the same crop oil concentrate that will be used on the field. If no crop response is evident seven (7) days after treatment, PS Clethodim may be used on the entire field at the rate tested and with the same crop oil used in the crop safety test.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) in a single application. • DO NOT make more than 4 applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 8 applications at 4 fl. oz./A |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|---|--|--------------------------------------|--|---|
| Tomato | 20 days | 6-16 fl. oz. (0.094-0.25 lb. a.i./A) | 1% v/v in the finished spray volume. | (0.0625 lb. a.i./A) per year. For repeat applications make on a minimum of a 14-day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) in a single application. • DO NOT make more than 4 applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Tree Nuts [Crop Group 14-12][*] Including: African Nut-tree Almond Beechnut Brazil Nut Brazilian Pine Bunya Bur Oak Butternut Cajou Nut Candlenut Cashew Chestnut Chinquapin Coconut Coquito Nut Dika Nut Ginkgo Guiana Chestnut Hazelnut (Filbert) Heartnut Hickory Nut Japanese Horse-chestnut Macadamia Nut Mongongo Nut Monkey-pot Monkey Puzzle Nut Okari Nut Pachira Nut Peach Palm Nut Pecan | 14 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | For repeat applications make on a minimum of a 14 day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|--|--|--------------------------------------|--|---|
| Pequi Pili Nut Pine Nut Pistachio Sapucaia Nut Tropical Almond Walnut, Black Walnut, English Yellowhorn Cultivars, varieties, and/or hybrids of these. | | | | |
| Tuberous and Corm Vegetables [Subgroup 1C] (except Potato) Including: Arracacha Arrowroot Artichoke (Chinese, Jerusalem) Canna, edible Cassava (Bitter, Sweet) Chayote (root) Chufa Dasheen Ginger Leren Sweet Potato Tanier Tumeric Yam Bean Yam, true | 30 days | 6-16 fl. oz. (0.094-0.25 lb. a.i./A) | 1% v/v in the finished spray volume. | For repeat applications make on a minimum of a 14 day interval. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) in a single application. • DO NOT make more than 4 applications at the lowest rate, 6-8 fl. oz. (0.094-0.125 lb. a.i./A), or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Turnip Greens | 14 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume. | For repeat applications make on a minimum of a 14-day interval. Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. |
| Watercress[*] | 30 days | 6-8 fl. oz. (0.094-0.125 lb. a.i./A) | 1% v/v in the finished spray volume | For repeat applications make on a minimum of a 14 day interval. Restrictions |

| Crops ⁽¹⁾ | Minimum Time From Application to Harvest (PHI) | Use Rates Per Acre | Crop Oil Concentrate Rates Per Acre ⁽²⁾ | Special Use Instructions |
|----------------------|--|--------------------|--|--|
| | | | | <ul style="list-style-type: none"> • DO NOT apply more than 8 fl. oz./A (0.125 lb. a.i./A) in a single application. • DO NOT make more than 4 applications per acre per year. • DO NOT apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year. • DO NOT apply when watercress is under flood conditions. • DO NOT apply PS Clethodim when water is in the field and hold water for at least 24 hours after an application. |

N/A = Not Applicable

[*Not for use in California]

¹ PS Clethodim is not advised for use on vegetable crops being grown for seed production unless specific use directions are provided.

² Acceptable crop oil concentrates would be those which contain a minimum of 80% oils and 15% emulsifier. 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. See the Addition of Adjuvant and Crop Oil Concentrate section for further information.

³ PS Clethodim may be applied to seedling or established alfalfa grown for seed, hay, silage, green crop or direct grazing.

⁴ For weed control in established alfalfa and mint (peppermint and spearmint tops), the minimum use rate is 10 fl. oz./A (0.156 lb. a.i./A).

⁵ 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N, or 32%N), or an equivalent amount (2.5 to 4.0 lbs./A) of spray grade ammonium sulfate (AMS) may be added to PS Clethodim applications, in addition to the specified rate of crop oil concentrate.

⁶ **DO NOT** apply PS Clethodim plus 2,4-DB as a tank mix to alfalfa unless the 60 day feeding, grazing, and harvesting restriction on the 2,4-DB label can be observed.

IMPORTANT

Plant resistance to PS Clethodim 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 advised 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 PS Clethodim have investigated the safety factor to plants not listed on the label.

DIRECTIONS FOR NON-BEARING FOOD CROPS

PS CLETHODIM MUST 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 PS Clethodim is improperly applied. PS Clethodim must not be applied directly over the top of these plant types. Instead, spray must 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 PS Clethodim application.

| COMMON NAME | SCIENTIFIC NAME |
|---------------|--|
| Apples | <i>Malus</i> spp. |
| Berries | <i>Vaccinium</i> spp. <i>Rubus</i> spp. |
| Cherry, Sweet | <i>Prunus avium</i> |
| Citrus Fruits | <i>Citrus</i> spp. |
| Grapes | <i>Vitis</i> spp. |
| Olives | <i>Olea</i> spp. |
| Peach | <i>Prunus persica</i> |
| Pears | <i>Pyrus communis</i> |
| Prunes | <i>Prunus</i> spp. |
| Stone Fruits | <i>Prunus</i> spp. |
| Strawberries | <i>Fragaria</i> spp. |
| Tree Nuts | |
| Almond | <i>Prunus triloba</i> |
| Filbert | <i>Corylus maxima</i> |
| Pecan | <i>Carya illinoensis</i> |
| Pistachio | <i>Pistacia vera</i> |
| Walnut | <i>Juglans</i> spp. |

Use Rates Per Acre: 6-8 fl. oz. (0.094-0.125 lb. a.i./A)

Use Instructions

Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gals (0.25% v/v).

Use of crop oil concentrate is not advised since it may injure flowers and foliage.

Sugar maples cannot be tapped for syrup within one year of PS Clethodim application.
For repeat application make on a minimum of a 14 day interval.

Restrictions

- If PS Clethodim 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.
- PS Clethodim must not be applied to non-bearing fruit or nut crops which are grown for root stock.
- **DO NOT** apply more than 8 fl. oz./A (0.125 lb. a.i./A) per application.
- **DO NOT** make more than 4 applications per acre per year.
- **DO NOT** apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year.

CONIFER TREES

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

| COMMON NAME | SCIENTIFIC NAME |
|---------------------------|------------------------------|
| Arborvitae, American | <i>Thuja occidentalis</i> |
| Cedars | <i>Cedrus</i> spp. |
| Cypress | <i>Taxodium</i> spp. |
| Fir, Douglas | <i>Pseudotsuga menziesii</i> |
| Firs | <i>Abies</i> spp. |
| Hemlock, Canadian/Eastern | <i>Tsuga Canadensis</i> |
| Hemlock, Western | <i>Tsuga heterophylla</i> |
| Pines | <i>Pinus</i> spp. |
| Spruces | <i>Picea</i> spp. |
| Yew | <i>Taxus</i> spp. |

Use Rates per Acre: 6-16 fl. oz. (0.094-0.125 lb. a.i./A)

Special Use Instructions

Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gals (0.25% v/v).

For repeat application make on a minimum of a 14 day interval.

Restrictions

- **DO NOT** apply more than 16 fl. oz./A (0.25 lb. a.i.) per application.
- **DO NOT** make more than 2 applications per acre per year at the 16 fl. oz. (0.25 lb. a.i./A) rate. Do not make more than 5 applications per acre per year at the 6 fl. oz. (0.094 lb. a.i./A) rate.
- **DO NOT** apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year.

DIRECTIONS FOR 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.

| GRASS SUPPRESSION IN NON-CROP AREAS WITH PS CLETHODIM | | | |
|--|---|------------------------|-----------------------|
| GRASS SPECIES | WEED STAGE | RATE FL. OZ./ACRE | HIGH RATE |
| Annual and perennial grasses that exceed height claimed for control on height charts above. | Up to and including grasses in the seed head stage. | 12 (0.188 lb. a.i.) | 16 (0.25 lb. a.i.) |
| Restrictions: | | | |
| <ul style="list-style-type: none"> • DO NOT apply as part of a tank mix when applying PS Clethodim for grass suppression. • Add a crop oil concentrate at 1 qt./A by ground to the finished spray volume. • DO NOT apply more than 16 fl. oz./A (0.25 lb. a.i./A) per application. • DO NOT apply more than 64 fl. oz./A (1.00 lb. a.i./A) per year. • DO NOT apply more than 4 applications per year. • For repeat applications make on a minimum of a 14 day interval. | | | |

DIRECTIONS FOR ANNUAL GRASSES

(EXCEPT FOR IN ESTABLISHED ALFALFA AND PEPPERMINT AND SPEARMINT TOPS)

- 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.

Restrictions

- **DO NOT** exceed the maximum rate per application listed in the table CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR PS CLETHODIM.
- **DO NOT** exceed the maximum number of applications per year listed in the table CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR PS CLETHODIM.
- **DO NOT** exceed the maximum yearly rate listed in the table CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR PS CLETHODIM.

| GRASS SPECIES | SCIENTIFIC NAME | WEED HEIGHT* (inches) | RATE FL. OZ./ ACRE ⁽⁵⁾ | HIGH RATE ⁽¹⁾ |
|-----------------------|-------------------------------|--------------------------|---|--------------------------|
| Barnyardgrass | <i>Echinochloa crus-galli</i> | 2 to 8 | 6 | 8 |
| Broadleaf Signalgrass | <i>Brachiaria platyphylla</i> | 2 to 6 | 6 | 8 |
| Brome | | | | |
| California | <i>Bromus carinatus</i> | 2 to 6 | 6 | 8 |
| Cheat | <i>Bromus secalinus</i> | 2 to 6 | 6 | 8 |
| Downy | <i>Bromus tectorum</i> | 2 to 6 | 6 | 8 |
| Ripgut | <i>Bromus diandrus</i> | 2 to 6 | 6 | 8 |
| Canarygrass | <i>Phalaris canariensis</i> | 1 to 4 | 6 | 8 |

| GRASS SPECIES | SCIENTIFIC NAME | WEED HEIGHT* (inches) | RATE FL. OZ./ ACRE ⁽⁵⁾ | HIGH RATE ⁽¹⁾ |
|--------------------------------------|------------------------------------|-----------------------|-----------------------------------|--------------------------|
| Crabgrass | | | | |
| Hairy | <i>Digitaria adscendens</i> | 2 to 6** | 6 | 8 |
| Large | <i>Digitaria sanguinalis</i> | 2 to 6** | 6 | 8 |
| Smooth | <i>Digitaria ischaemum</i> | 2 to 6** | 6 | 8 |
| Southern | <i>Digitaria ciliaris</i> | 2 to 6** | 6 | 8 |
| Crowfootgrass | <i>Dactyloctenium aegyptium</i> | 2 to 6** | 6 | 8 |
| Fall Panicum | <i>Panicum dichotomiflorum</i> | 2 to 8 | 6 | 8 |
| Field Sandbur | <i>Cenchrus incertus</i> | 2 to 6 | 6 | 8 |
| Foxtail | | | | |
| Giant | <i>Setaria faberi</i> | 2 to 12 | 6 | 8 |
| Green | <i>Setaria viridis</i> | 2 to 8 | 6 | 8 |
| Yellow | <i>Setaria glauca</i> | 2 to 8 | 6 | 8 |
| Goosegrass | <i>Eleusine indica</i> | 2 to 6** | 6 | 8 |
| Itchgrass | <i>Rottboellia cochinchinensis</i> | 2 to 6 | 6 | 8 |
| Junglerice | <i>Echinochloa colona</i> | 2 to 6 | 6 | 8 |
| Lovegrass (Stinkgrass) | <i>Eragrostis cilianensis</i> | 2 to 6 | 6 | 8 |
| Rabbitsfootgrass | <i>Polypogon monspeliensis</i> | 1 to 4 | 6 | 8 |
| Red Rice | <i>Oryza sativa</i> | 1 to 3 | 6 | 8 |
| Ryegrass | | | | |
| Hardy | <i>Lolium remotum</i> | 2 to 6 | 6 | 8 |
| Italian | <i>Lolium multiflorum</i> | 2 to 6 | 6 | 8 |
| Seedling Johnsongrass | <i>Sorghum halepense</i> | 4 to 10 | 6 | 8 |
| Shattercane | <i>Sorghum bicolor</i> | 6 to 18 | 6 | 8 |
| Southwestern Cupgrass | <i>Eriochloa gracilis</i> | 2 to 6 | 6 | 8 |
| Sprangletop | | | | |
| Amazon | <i>Leptochloa panicoides</i> | 2 to 6 | 6 | 8 |
| Bearded | <i>Leptochloa fascicularis</i> | 2 to 6 | 6 | 8 |
| Mexican | <i>Leptochloa uninervia</i> | 2 to 6 | 6 | 8 |
| Red | <i>Leptochloa filiformis</i> | 2 to 6 | 6 | 8 |
| Texas Panicum | <i>Panicum texanum</i> | 2 to 6 | 6 | 8 |
| Volunteer Cereals ⁽²⁾ | | | | |
| Barley | <i>Hordeum vulgare</i> | 2 to 6 | 6 | 8 |
| Oats | <i>Avena sativa</i> | 2 to 6 | 6 | 8 |
| Rye | <i>Secale cereal</i> | 2 to 6 | 6 | 8 |
| Wheat | <i>Triticum aestivum</i> | 2 to 6 | 6 | 8 |
| Volunteer Corn ⁽³⁾ | <i>Zea mays</i> | 4 to 12 | 4 | 6 |
| Volunteer Corn ⁽³⁾ | <i>Zea mays</i> | 12 to 24 | 6 | 8 |
| Volunteer Corn (S.R.) ⁽⁴⁾ | <i>Zea mays</i> | 4 to 12 | 8 (suppression only) | |
| Volunteer Grain Sorghum | <i>Sorghum bicolor</i> | 8 to 12 | 6 | 8 |
| Wild Oats | <i>Avena fatua</i> | 2 to 6 | 6 | 8 |
| Wild Proso Millet | <i>Panicum miliaceum</i> | 2 to 10 | 6 | 8 |
| Witchgrass | <i>Panicum capillare</i> | 2 to 8 | 6 | 8 |
| Woolly Cupgrass | <i>Eriochloa villosa</i> | 2 to 8 | 6 | 8 |

* Generally occurs between 3-leaf stage and tillering.

** Length of lateral growth.

(1) Rates higher than 8 fl. oz./A (0.125 fl. 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 8 to 16 fl. oz./A (0.125 to 0.25 lb. a.i./A) may be applied.

(2) When a cereal grain crop (including wheat) is interseeded for crop establishment or is planted as wind breaks to aid crop establishment, the minimum PS Clethodim use rate for control is 8 fl. oz./A (0.125 lb. a.i./A).

(3) Includes Roundup Ready®, Liberty Link®, and IMI-CORN® volunteer corn.

(4) Sethoxydim resistant volunteer corn.

(5) 4 fl. oz./A (0.0625 lb. a.i./A); 6 fl. oz./A (0.094 lb. a.i./A); 8 fl. oz./A (0.125 lb. a.i./A).

DIRECTIONS FOR ANNUAL & PERENNIAL GRASS CONTROL IN ESTABLISHED ALFALFA AND PEPPERMINT AND SPEARMINT TOPS WITH PS CLETHODIM

| GRASS SPECIES | WEED STAGE | RATE FL. OZ./ACRE | HIGH RATE |
|--|------------|------------------------|-----------------------|
| Annual & Perennial Grasses Listed in Grass Table | See Table | 10 (0.156 lb. a.i.) | 16 (0.25 lb. a.i.) |

Mowing: The best control of annual grasses can be achieved by applying PS Clethodim before grass weeds are mowed. Once 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 PS Clethodim for partial or complete control.

Irrigated Alfalfa and Mint (peppermint and spearmint tops): Irrigation practices can be very critical to the successful use of PS Clethodim in established alfalfa and mint (peppermint and spearmint tops) 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 PS Clethodim in a minimum of 10 GPA in established alfalfa and mint (peppermint and spearmint tops) when applying by air.

Annual Grass Control: Apply PS Clethodim at the grass sizes indicated in the Annual Grass Table and rates indicated. If a grass has been cut, apply PS Clethodim 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 (peppermint and spearmint tops) 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 PS Clethodim 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, including frost, slower plant growth, or the onset of flowering.

Perennial Grass Control: PS Clethodim effectively controls perennial grasses including 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 including established alfalfa or mint (peppermint or spearmint tops). 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.

Always add a crop oil concentrate at 1 qt./A by ground or 1% v/v (but not less than 1 pt./A) to the finished spray volume by air.

DIRECTIONS FOR ANNUAL BLUEGRASS CONTROL WITH PS CLETHODIM

| GRASS SPECIES | WEED STAGE | RATE FL. OZ./ ACRE | HIGH RATE |
|---------------------------------------|------------|--------------------------|-----------------------|
| Annual Bluegrass (<i>Poa annua</i>) | to 4-leaf | 6* (0.094 lb. a.i.) | 16 (0.25 lb. a.i.) |

- 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).

- 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.
- Always add a crop oil concentrate at 1 qt./A by ground to the finished spray volume.

*Use a minimum of 10 fl. oz./A (0.156 lb. a.i./A) to control annual bluegrass in seedling and established alfalfa and mint (peppermint and spearmint tops).

FOR USE IN ROUNDUP READY FIELD CORN (BURNDOWN)

| GRASS SPECIES | WEED SIZE (inches) | Rate when applied alone or with glyphosate |
|--|--------------------|--|
| Field Corn | Up to 12 | 3 fl. oz./A (0.047 lb. a.i.) |
| <ul style="list-style-type: none"> • For control of existing stand of Roundup Ready field corn or volunteer Roundup Ready field corn prior to replanting corn. • 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 directions: NIS at 0.25% v/v plus AMS at 2.5 to 4 lbs./A. • DO NOT use COC or MSO with PS Clethodim in this use pattern. | | |
| Restrictions: | | |
| <ul style="list-style-type: none"> • DO NOT apply more than 3 fl. oz./A (0.05 lb. a.i./A) per application. • DO NOT apply more than 12 fl. oz./A (0.19 lb. a.i./A) per year. • DO NOT apply more than 4 applications per year. | | |

DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES IN CANOLA, DRIED SHELLED BEAN & PEA (INCLUDING SOYBEAN), EDIBLE PODDED LEGUME VEGETABLES, FLAX, MUSTARD SEED, SUCCULENT BEAN & PEA, AND SUGAR BEET

(REDUCED RATE DIRECTIONS 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 ^(1,2) |
|-----------------------|--------------------------------|----------------------|------------------------------------|
| Barnyardgrass | <i>Echinochloa crus-galli</i> | 1 to 4 | 4 |
| Broadleaf Signalgrass | <i>Brachiaria platyphylla</i> | 1 to 4 | 5 |
| Crabgrass | | | |
| Large | <i>Digitaria sanguinalis</i> | 1 to 3* | 4 |
| Large | <i>Digitaria sanguinalis</i> | 1 to 4* | 5 |
| Smooth | <i>Digitaria ischaemum</i> | 1 to 3* | 4 |
| Smooth | <i>Digitaria ischaemum</i> | 1 to 4* | 5 |
| Southern | <i>Digitaria ciliaris</i> | 1 to 4* | 5 |
| Fall Panicum | <i>Panicum dichotomiflorum</i> | 1 to 4 | 4 |
| Foxtail | | | |
| Giant | <i>Setaria faberi</i> | 1 to 4 | 4 |
| Green | <i>Setaria viridis</i> | 1 to 4 | 4 |
| Millet | <i>Setaria italica</i> | 1 to 4 | 5 |
| Yellow | <i>Setaria glauca</i> | 1 to 4 | 4 |
| Seedling Johnsongrass | <i>Sorghum halepense</i> | 1 to 6 | 5 |
| Shattercane | <i>Sorghum bicolor</i> | 4 to 10 | 4 |
| Texas Panicum | <i>Panicum texanum</i> | 1 to 4 | 5 |
| Volunteer Cereals | | | |

| GRASS SPECIES | SCIENTIFIC NAME | WEED HEIGHT (inches) | RATE FL. OZ./ACRE ^(1,2) |
|-------------------|--------------------------|----------------------|------------------------------------|
| Barley | <i>Hordeum vulgare</i> | 1 to 4 | 5 |
| Oats | <i>Avena sativa</i> | 1 to 4 | 5 |
| Wheat | <i>Triticum aestivum</i> | 1 to 4 | 5 |
| Volunteer Corn** | <i>Zea mays</i> | 4 to 12 | 4 |
| Wild Proso Millet | <i>Panicum miliaceum</i> | 1 to 6 | 4 |
| Wild Oats | <i>Avena fatua</i> | 1 to 4 | 5 |

* Length of lateral growth

** Not S.R. Corn

(1) Always add a crop oil concentrate at 1 qt./A by ground application to the finished spray volume.

(2) 4 fl. oz./A (0.0625 lb. a.i./A); 5 fl. oz./A (0.078 lb. a.i./A)

DIRECTIONS FOR PERENNIAL GRASSES

- 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.

Restrictions

- **DO NOT** exceed the maximum rate per application listed in the table CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR PS CLETHODIM.
- **DO NOT** exceed the maximum number of applications per year listed in the table CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR PS CLETHODIM.
- **DO NOT** exceed the maximum yearly rate listed in the table CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR PS CLETHODIM.

| GRASS SPECIES | WEED HEIGHT (inches) | RATE FL. OZ./ACRE ⁽¹⁾ | HIGH RATE |
|--|-------------------------|----------------------------------|-----------|
| Bermudagrass (<i>Cynodon dactylon</i>) | | | |
| First Application | 3 (or up to 6" runners) | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 3 (or up to 6" runners) | 8 | 16 |
| Fescue, Tall (<i>Festuca arundinacea</i>) | | | |
| First Application | 4 to 8 | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 4 to 8 | 8 | 16 |
| Foxtail Barley (<i>Hordeum jubatum</i>) | | | |
| First Application | 2 to 6 | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 2 to 6 | 8 | 16 |
| Orchardgrass (<i>Dactylis glomerata</i>) | | | |
| First Application | 4 to 8 | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 4 to 8 | 8 | 16 |
| Quackgrass* (<i>Elytrigia repens</i>) | | | |
| First Application | 4 to 12 | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 4 to 12 | 8 | 16 |
| Rhizome Johnsongrass (<i>Sorghum halepense</i>) | | | |
| First Application | 12 to 24 | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 6 to 18 | 6 | 8 |
| Wirestem Muhly (<i>Muhlenbergia frondosa</i>) | | | |
| First Application | 4 to 8 | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 4 to 8 | 8 | 16 |

| GRASS SPECIES | WEED HEIGHT (inches) | RATE FL. OZ./ACRE ⁽¹⁾ | HIGH RATE |
|--|-------------------------|-------------------------------------|--------------|
| Perennial Bluegrass* | | | |
| Roughstalk (<i>Poa trivialis</i>) | | | |
| Kentucky (<i>Poa pratensis</i>) | | | |
| First Application | 2 to 4 | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 2 to 4 | 8 | 16 |
| | | | |
| Bentgrass* (<i>Agrostis</i> spp.) | | | |
| First Application | 2 to 4 | - | 16 |
| Repeat Application(s) (if regrowth occurs) | 2 to 4 | - | 16 |

*Control of quackgrass, perennial bluegrass and bentgrass with PS Clethodim may be enhanced by adding AMS at 2.5 to 4.0 lbs./A.

⁽¹⁾ 6 fl. oz./A (0.094 lb. a.i./A); 8 fl. oz./A (0.125 lb. a.i./A)

TANK MIXES INFORMATION

The labels for each of the herbicides directed for tank mixing with PS Clethodim are unique to the characteristics of those products and contain restrictions and limitations that may be more restrictive than the PS Clethodim 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 year;
7. Rain free period required; or
8. Application timing (e.g., pre-harvest interval);
9. **DO NOT** exceed the total year rates.

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

TANK MIX APPLICATION OF PS CLETHODIM 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 PS Clethodim, as specified in the respective size and rate tables.
- **DO NOT** tank mix PS Clethodim 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 PS Clethodim. Agitation must create a rippling or rolling action on the water surface.
3. If tank mixing PS Clethodim 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 must 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 must be verified by a jar test.

INFORMATION ON ANTAGONISM

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

DIRECTIONS FOR ALFALFA

**Table 1. PS CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR ALFALFA
(Refer to tables above for specific grasses and growth stages)**

| PRODUCT ⁽²⁾ | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE ⁽³⁾ (V/V) | |
|---|---|---|---|------|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| | PS Clethodim + Dimethylamine 4-(2,4-dichlorophenoxy) butyrate ⁽⁴⁾ | 10 to 16 fl. oz. (0.156-0.25 lb. a.i.) + Refer to Dimethylamine 4-(2,4-dichlorophenoxy) butyrate label for use rate. | 10 to 16 fl. oz. (0.156-0.25 lb. a.i.) + Refer to Dimethylamine 4-(2,4-dichlorophenoxy) butyrate label for use rate. | 1% |
| PS Clethodim + imazethapyr ⁽⁵⁾ | 10 to 16 fl. oz. (0.156-0.25 lb. a.i.) + Refer to imazethapyr labels for use rate. | - | 1% | 1% |
| PS Clethodim + bromoxynil ⁽⁶⁾⁽⁷⁾ | 10 to 16 fl. oz. (0.156-0.25 lb. a.i.) + Refer to bromoxynil label for use rate. | - | 0.5% | 0.5% |

- (1) If grass regrowth occurs or an additional flush of new grass emerges, make a second application of PS Clethodim alone (without a tank mix herbicide), according to the appropriate size and rate directions.
- (2) 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 advised in these situations.
- (3) Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.
- (4) PS Clethodim plus Dimethylamine 4-(2,4-dichlorophenoxy) butyrate may increase the severity of crop injury when tank mixed. Alfalfa plants will generally outgrow this temporary crop injury within a few weeks.
- (5) Before using this tank mix, read and understand the imazethapyr 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 imazethapyr to alfalfa.
- (6) 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 PS Clethodim plus bromoxynil 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. PS Clethodim plus bromoxynil 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 the alfalfa stand is uneven and conditions favor leaf burn, unacceptable crop injury may occur to alfalfa in the 2 trifoliolate or smaller stage of growth. PS Clethodim plus bromoxynil 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 PS Clethodim plus bromoxynil application. Warm, humid conditions may enhance leaf burn. New crop growth will not be affected.
- (7) **DO NOT** apply when alfalfa is under moisture, temperature, insect or disease stress or has been stressed by other pesticide carryover or application.

DIRECTIONS FOR CANOLA (EXCEPT FLAX)
[Rapeseed Subgroup 20A (except flax seed, mustard seed and sesame seed)]

Table 2. REDUCED RATE PS CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR CANOLA (Refer to the tables above for specific grasses and growth stages.)

| PRODUCT | APPLICATION RATES/ACRE | | AMMONIUM SULFATE | |
|--|--|-------------------|------------------|----------|
| | ANNUAL GRASSES ⁽¹⁾ | PERENNIAL GRASSES | GROUND | AIR |
| PS Clethodim ⁽²⁾ + glufosinate ⁽³⁾ | 4 to 5 fl. oz. (0.063-0.078 lb. a.i.) + Refer to glufosinate label for use rate. | - | 3.0 lbs. | 3.0 lbs. |

⁽¹⁾ Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES table.

⁽²⁾ **DO NOT** apply PS Clethodim tank mix during or after bolting or flowering or crop injury may occur.

⁽³⁾ For use only on LibertyLink® canola.

DIRECTIONS FOR COTTON

Table 3. PS CLETHODIM TANK MIXED WITH LACTOFEN AND MSMA APPLIED POST DIRECTED TO COTTON

| PRODUCT ⁽¹⁾ | APPLICATION RATES/ACRE ⁽²⁾ | | CROP OIL CONCENTRATE ⁽³⁾ V/V | COMMENTS |
|---|--|--|--|--|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | |
| PS Clethodim ⁽⁴⁾ + lactofen + MSMA (4.0 lbs./gal.) or MSMA (6.6 lbs./gal.) | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) | 1% | Reduce broadcast rate in proportion to the band area actually treated. |
| | See lactofen label for rates to control broadleaf weeds and height limitations for cotton. Refer to the PS Clethodim label for weed height and species controlled. | | | |
| | See MSMA label for rates to control broadleaf weeds and height limitations for cotton. Refer to the PS Clethodim 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 advised in these situations.

⁽²⁾ If grass regrowth occurs or an additional flush of new grass emerges, make a second application of PS Clethodim alone (without a tank mix herbicide), according to the appropriate size and rate directions.

⁽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 PS Clethodim may be necessary.

Table 4. PS CLETHODIM TANK MIXED WITH BROMOXNYL TO CONTROL EMERGED WEEDS IN BXN COTTON AS A BROADCAST APPLICATION

| PRODUCT ⁽¹⁾ | APPLICATION RATES/ACRE ⁽²⁾ | CROP OIL CONCENTRATE PER ACRE ⁽³⁾ | COMMENTS ⁽⁷⁾ |
|--|--|--|------------------------------------|
| | ANNUAL GRASSES | | |
| PS Clethodim + bromoxynil ^(4,5,6) | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + See bromoxynil label for rates to control broadleaf weeds and height limitations for cotton | 1 qt. | See charts for grasses 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.

- (2) If grass regrowth occurs or an additional flush of new grass emerges, make a second application of PS Clethodim at the specified rate with the appropriate amount of crop oil concentrate in a non-bromoxynil tank mix.
- (3) Always add a crop oil concentrate at 1 qt./A by ground in the finished spray solution.
- (4) Applications of bromoxynil can be made only to cotton that has been genetically modified for crop resistance to postemergence over-the-top application of bromoxynil.
- (5) **DO NOT** apply the PS Clethodim plus bromoxynil tank mix within 75 days of harvest.
- (6) **DO NOT** exceed 2 applications of bromoxynil before cotton is 12 inches tall and one application after 12 inches tall.
- (7) Use a minimum of 10 gals. of spray solution per acre.

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

| PRODUCT | APPLICATION RATES/ACRE ⁽¹⁾ | | ADJUVANT | | COMMENTS |
|---------------------------|--|---------------------------------------|---|--|--|
| | ANNUAL GRASSES | PERENNIAL GRASSES | Glyphosate formulation with built in adjuvant | Glyphosate formulation without built in adjuvant | |
| PS Clethodim + glyphosate | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) | Non-ionic surfactant @ 0.125 to 0.25% v/v plus ammonium sulfate @ 8.5 to 17 lbs. per 100 gals. of carrier | Crop oil concentrate @ 1 pt./A plus ammonium sulfate @ 8.5 to 17 lbs. per 100 gals. of carrier | 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 PS Clethodim at the specified rate with the appropriate amount of crop oil concentrate.

DIRECTIONS FOR DRY SHELLED AND SUCCULENT BEANS
[Succulent Shelled Pea and Beans Subgroup 6B]
[Dried Shelled Pea and Bean (except Soybean 6C)]

Table 6. PS CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR DRY SHELLED AND SUCCULENT BEANS

(Refer to the tables above for specific grasses and growth stages.)

| PRODUCT ⁽²⁾ | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE ⁽³⁾ (V/V) | |
|------------------------|---------------------------------------|-------------------|--|--|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| | | | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + Refer to bentazon label for use rate. | 10 to 16 fl. oz. (0.156-0.25 lb. a.i.) + 1 to 2 pts. |

- (1) If grass regrowth occurs or an additional flush of new grass emerges, make a second application of PS Clethodim alone (without a tank mix herbicide), according to the appropriate size and rate directions.
- (2) 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 advised in these situations.
- (3) Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

DIRECTIONS FOR FLAX

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

| PRODUCT | APPLICATION RATES/ACRE | | CROP OIL CONCENTRATE | |
|---------|-------------------------------|-------------------|----------------------|-------|
| | ANNUAL GRASSES ⁽¹⁾ | PERENNIAL GRASSES | GROUND | AIR |
| | | | 4 to 5 fl. oz. | 1 pt. |

| | | | | |
|--|---|---|-------|-------|
| MCPA & bromoxynil octanoate & bromoxynil heptanoate | (0.063-0.078 lb. a.i.) + | - | | |
| | Refer to product label for use rate. | | | |
| PS Clethodim + | 4 to 5 fl. oz. (0.063-0.078 lb. a.i.) + | - | 1 pt. | 1 pt. |
| bromoxynil ^{2,3)} | Refer to bromoxynil label for use rate. | | | |
| PS Clethodim + | 4 to 5 fl. oz. (0.063-0.078 lb. a.i.) + | - | 1 pt. | 1 pt. |
| MCPA ester ^{2,3)} | Refer to MCPA ester label for use rate. | | | |

(1) Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES table.

(2) **DO NOT** apply PS Clethodim 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 85°F at (or 3 days following) application or crop injury may occur.

DIRECTIONS FOR SOYBEAN

Table 8. PS CLETHODIM TANK MIXES⁽³⁾ TO CONTROL ANNUAL GRASSES WHEN USED AS A BURNDOWN IN NO-TILL SOYBEAN

| PRODUCT | PRODUCT RATE/ACRE ⁽¹⁾ | GRASS HEIGHT (inches) | CROP OIL CONCENTRATE /ACRE ⁽²⁾ | 28%N OR 32%N QTS./A OR 2.5 TO 4.0 LBS. AMS |
|-------------------|--|--|---|--|
| PS Clethodim + | 3 fl. oz. (0.047 lb. a.i.) | Foxtail 1 to 3 Fall Panicum 1 to 3 | 1 qt. | 1 to 2 qts. or 2.5 to 4.0 lbs. AMS |
| | 4 fl. oz. (0.063 lb. a.i.) | Foxtail 1 to 4 Fall Panicum 1 to 4 | 1 qt. | 1 to 2 qts. or 2.5 to 4.0 lbs. AMS |
| | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + | (See Grass Chart for grasses claimed.) | 1 qt. | 1 to 2 qts. or 2.5 to 4.0 lbs. AMS |
| 2,4-D ester* | Refer to 2,4-D ester label for use rate. | | | |

* 2,4-D ester must not be used where drift sensitive crops may be grown.

(1) If regrowth occurs or an additional flush of new grass emerges, make a second application of PS Clethodim according to the appropriate size and rate directions.

(2) Always use a crop oil concentrate at the listed rate in the finished spray volume.

Table 9. PS CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN (Refer to the tables above for specific grasses and growth stages.)

| PRODUCT ⁽²⁾ | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE ⁽³⁾ (V/V) | |
|------------------------|--|--|---|-----|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| | | | | |
| PS Clethodim + | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + | 0.5 to 1% | 1% |
| lactofen | Refer to the lactofen label for use rate. | Refer to the lactofen label for use rate. | | |
| PS Clethodim + | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + | 10 to 16 fl. oz. (0.156-0.25 lb. a.i.) + | 1% | 1% |
| bentazon | | | | |

| PRODUCT ⁽²⁾ | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE ⁽³⁾ (V/V) | |
|---|--|---|---|-------------------|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| | | | | |
| | Refer to the bentazon label for use rate. | Refer to the bentazon label for use rate. | | |
| PS Clethodim + Glyphosate (For use on Roundup Ready soybean only) | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the glyphosate label for use rate. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + Refer to the glyphosate label for use rate. | 0.5 to 1% ⁽⁴⁾ | 1% ⁽⁴⁾ |
| PS Clethodim + acifluorfen | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the acifluorfen label for use rate. | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the acifluorfen label for use rate. | 0.5% to 1% | 1% |
| PS Clethodim + fomesaafen ⁽⁶⁾ | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the fomesaafen label for use rates. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + Refer to the fomesaafen label for use rates. | 1% | 1% |
| PS Clethodim + chlorimuron ethyl | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + Refer to the chlorimuron ethyl label for use rates. | 10 to 16 fl. oz. (0.156-0.25 lb. a.i.) + Refer to the chlorimuron ethyl label for use rates. | 1% | 1% |
| PS Clethodim ⁽⁴⁾ + imazethapyr | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the imazethapyr label for use rates. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + Refer to the imazethapyr label for use rates. | 1% | 1% |
| PS Clethodim ⁽⁵⁾ + lactofen + chlorimuron ethyl | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + Refer to the lactofen label for use rates. + Refer to the chlorimuron ethyl label for use rates. | - | 0.5% | 1% |
| PS Clethodim ⁽⁵⁾ + lactofen + bentazon | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + Refer to the lactofen label for use rates. + Refer to the bentazon label for use rates. | - | 0.5% | 1% |
| PS Clethodim ⁽⁵⁾ + lactofen + imazethapyr | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + Refer to the lactofen label for use rates. + Refer to the imazethapyr label for use rates. | - | 0.5% | 1% |

| PRODUCT ⁽²⁾ | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE ⁽³⁾ (V/V) | |
|---|---|--|---|-----|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| | | | | |
| PS Clethodim ⁽⁵⁾ + bentazon + acifluorfen | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + Refer to the bentazon + acifluorfen label for use rates. | - | 0.5% | 1% |
| PS Clethodim ⁽⁵⁾ + flumiclorac + imazethapyr | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + Refer to the flumiclorac label for use rates. + Refer to the imazethapyr label for use rates. | - | 1% | 1% |
| PS Clethodim ⁽⁵⁾ + flumiclorac + bentazon | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + Refer to the flumiclorac label for use rates. + Refer to the bentazon label for use rates. | - | 1% | 1% |
| PS Clethodim ⁽⁵⁾ + flumiclorac + chlorimuron ethyl | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + Refer to the flumiclorac label for use rates. + Refer to the chlorimuron ethyl label for use rates. | - | 1% | 1% |
| PS Clethodim ⁽⁵⁾ + lactofen + flumiclorac | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the lactofen label for use rates. + Refer to the flumiclorac label for use rates. | - | 0.5% | 1% |
| PS Clethodim ⁽⁵⁾ + cloransulam | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the cloransulam label for use rates. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + Refer to the cloransulam label for use rates. | 1% | - |
| PS Clethodim ⁽⁵⁾ + lactofen + cloransulam | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the lactofen label for use rates. + Refer to the cloransulam label for use rates. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + Refer to the lactofen label for use rates. + Refer to the cloransulam label for use rates. | 1% | - |

| PRODUCT ⁽²⁾ | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE ⁽³⁾ (V/V) | |
|--|--|---|---|-----|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| | | | | |
| PS Clethodim ⁽⁵⁾ + imazamox | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the imazamox label for use rates. | - | 1% | - |
| PS Clethodim ⁽⁵⁾ + lactofen + imazamox | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the lactofen label for use rates. + Refer to the imazamox label for use rates. | - | 1% | - |
| PS Clethodim ⁽⁵⁾ + chlorimuron + thifensulfuron | 6 to 8 fl. oz. ⁽⁷⁾ (0.094-0.125 lb. a.i.) + Refer to the chlorimuron + thifensulfuron label for use rates. | - | 1 qt. | - |
| PS Clethodim ⁽⁵⁾ + lactofen + chlorimuron + thifensulfuron | 6 to 8 fl. oz. ⁽⁷⁾ (0.094-0.125 lb. a.i.) + Refer to the lactofen label for use rates. + Refer to the chlorimuron + thifensulfuron label for use rates. | - | 1 pt. | - |
| PS Clethodim ⁽⁵⁾ + flumiclorac | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the flumiclorac label for use rates. | - | 1 qt. | - |
| PS Clethodim + cloransulam + fomesafen ⁽⁵⁾ | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the cloransulam label for use rates. + Refer to the fomesafen label for use rates. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + Refer to the cloransulam label for use rates. + Refer to the fomesafen label for use rates. | 1% | - |

(1) If grass regrowth occurs or an additional flush of new grass emerges, make a second application of PS Clethodim alone (without a tank mix herbicide), according to the appropriate size and rate directions.

(2) 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 advised in these situations.

(3) Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

(4) The addition of 2.5 lbs. of ammonium sulfate is required when PS Clethodim is tank mixed with glyphosate. If the glyphosate formulation has a stand alone built in adjuvant, add 0.125% v/v non-ionic surfactant in place of crop oil concentrate. If the glyphosate formulation does not have a built in adjuvant, add 0.5 to 1% crop oil concentrate for ground application and 1% v/v for aerial application.

(5) The addition of 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N, or 32%N) is advised when PS Clethodim is tank mixed with imazethapyr, flumiclorac, bentazon & acifluorfen, cloransulam-methy, thifensulfuron & chlorimuron, imazamox, cloransulam-methyl & flumetsulam, lactofen plus chlorimuron, lactofen plus bentazon, lactofen plus imazethapyr, lactofen plus cloransulam-methyl, lactofen plus thifensulfuron & chlorimuron, and lactofen plus imazamox. An

equivalent amount (2.5 to 4.0 lbs./A) of spray grade ammonium sulfate (AMS) may be added in place of liquid fertilizer. Fertilizer adjuvants are to be added in addition to the crop oil concentrate.

(6) Refer to FLEXSTAR HL label for geographic and rotational restrictions.

(7) Annual grasses and sizes controlled with these tank mixes are those that are identified in the DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES table.

Table 10. REDUCED RATE PS CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN (Refer to table for reduced rate use in canola, dry shelled bean & pea, edible podded legume vegetables, flax, mustard seed, soybean, succulent bean & pea and sugar beet for small annual grasses for specific grasses and growth stages.)

| PRODUCT | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE ^(3,4) (V/V) | |
|----------------------------|--|-------------------|---|-----|
| | ANNUAL GRASSES ⁽²⁾ | PERENNIAL GRASSES | CROP OIL CONCENTRATE ^(3,4) (V/V) | |
| | | | GROUND | AIR |
| PS Clethodim + cloransulam | 4 to 8 fl. oz. (0.063-0.125 lb. a.i.) + Refer to the cloransulam label for use rates. | - | 1% | 1% |
| PS Clethodim + imazethapyr | 4 to 6 fl. oz. (0.063-0.094 lb. a.i.) + Refer to the imazethapyr label for use rates. | - | 1% | 1% |

(1) If grass regrowth occurs or an additional flush of new grass emerges, make a second application of PS Clethodim alone (without a tank mix herbicide), according to the appropriate size and rate directions.

(2) Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES table.

(3) Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

(4) The addition of 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N, or 32%N) is required when PS Clethodim is tank mixed at reduced rates. An equivalent amount (2.5 to 4.0 lbs./A) of spray grade ammonium sulfate (AMS) may be added in place of liquid fertilizer. Fertilizer adjuvants are to be added in addition to the crop oil concentrate.

DIRECTIONS FOR PEANUT (INCLUDING PERENNIAL)

Table 11. PS CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR PEANUT (INCLUDING PERENNIAL)

(Refer to the tables above for specific grasses and growth stages.)

| PRODUCT ⁽²⁾ | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE ⁽³⁾ (V/V) | |
|----------------------------|---|-------------------|---|-----|
| | ANNUAL GRASSES ⁽²⁾ | PERENNIAL GRASSES | CROP OIL CONCENTRATE ⁽³⁾ (V/V) | |
| | | | GROUND | AIR |
| PS Clethodim + bentazon | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + Refer to the bentazon label for use rates. | - | 1% | 1% |
| PS Clethodim + acifluorfen | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + Refer to the acifluorfen label for use rates. | - | 1% | 1% |
| PS Clethodim + bentazon + | 8 to 10 fl. oz. (0.125-0.156 lb. a.i.) + | - | 1% | 1% |

| | | | | |
|-------------|--|--|--|--|
| acifluorfen | Refer to the bentazon + acifluorfen label for use rates. | | | |
|-------------|--|--|--|--|

⁽¹⁾ If grass regrowth occurs or an additional flush of new grass emerges, make a second application of PS Clethodim alone (without a tank mix herbicide), according to the appropriate size and rate directions.

⁽²⁾ 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 advised in these situations.

⁽³⁾ Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

| GRASS SUPPRESSION FOR HARVEST EFFICIENCY IN PEANUT (INCLUDING PERENNIAL) WITH PS CLETHODIM | | | |
|---|---|-----------------------|----------------------|
| GRASS SPECIES | WEED STAGE | RATE FL. OZ./ACRE | HIGH RATE |
| Annual and perennial grasses that exceed height claimed for control on height charts " ANNUAL GRASSES " & " PERENNIAL GRASSES " | Up to and including grasses in the seed head stage. | 16 (0.25 lb. a.i.) | 32 (0.5 lb. a.i.) |
| DO NOT apply as part of a tank mix when apply PS Clethodim for grass suppression. | | | |
| Add a crop oil concentrate at 1 qt./A by ground to the finished spray volume. | | | |

DIRECTIONS FOR SUGAR BEET

Table 12. PS CLETHODIM TANK MIXED WITH CLOPYRALID APPLIED TO SUGAR BEET (Refer to the tables above for specific grasses and growth stages)

| PRODUCT ⁽²⁾ | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE ⁽³⁾ (V/V) | |
|-------------------------------------|--|--|---|-----|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| PS Clethodim + clopyralid | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) | 1% | 1% |
| See the clopyralid label for rates. | | | | |

⁽¹⁾ If grass regrowth occurs or an additional flush of new grass emerges, make a second application of PS Clethodim alone (without a tank mix herbicide), according to the appropriate size and rate directions.

⁽²⁾ 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 advised in these situations.

⁽³⁾ Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

Table 13. PS CLETHODIM TANK MIXED WITH DESMEDIPHAM + PHENMEDIPHAM OR DESMEDIPHAM APPLIED TO SUGAR BEET

| PRODUCT ⁽¹⁾ | WEEDS CONTROLLED | | WEED HEIGHT (inches) | APPLICATION RATE/ACRE ⁽²⁾ |
|---|-------------------|-------------------------------|----------------------|--------------------------------------|
| | COMMON NAME | SCIENTIFIC NAME | | |
| PS Clethodim ⁽³⁾ + desmedipham + phenmedipham or desmedipham | Barnyardgrass | <i>Echinochloa crus-galli</i> | 1 to 3 | 8 fl. oz. (0.125 lb. a.i.) |
| | Foxtail | | 1 to 3 | |
| | Foxtail Millet | <i>Setaria</i> spp. | 1 to 3 | |
| | Wild Oat | <i>Setaria italic</i> | 1 to 3 | |
| | Wild Proso Millet | <i>Avena fatua</i> | 1 to 3 | |
| | | <i>Panicum miliaceum</i> | | |
| See desmedipham + phenmedipham label for rates to control broadleaf weeds. No additives are advised in the tank mix. | | | | |
| See desmedipham label for rates to control broadleaf weeds. No additives are advised in the tank mix. | | | | |

⁽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 advised in these situations.

- (2) **DO NOT** use crop oil concentrate. No additives are advised in the tank mix. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of PS Clethodim alone (without a tank mix herbicide), according to the appropriate size and rate directions.
- (3) If grass regrowth occurs or an additional flush of new grass emerges, make a second application of PS Clethodim at full label rate with appropriate rate of crop oil concentrate.

Table 14. PS CLETHODIM PLUS DESMEDIPHAM + PHENMEDIPHAM OR DESMEDIPHAM TANK MIX FOR THREE SEQUENTIAL APPLICATIONS FOR ANNUAL GRASS CONTROL (MICRO-RATE APPLICATION)

| PRODUCT | APPLICATION RATES/ACRE ⁽¹⁾ | | METHYLATED SEED OIL ⁽²⁾ (V/V) | |
|---|--|---|--|------|
| | ANNUAL GRASSES | GRASSES CONTROLLED (inches) | GROUND | AIR |
| PS Clethodim + desmedipham + phenmedipham or desmedipham | 2 to 3 fl. oz. (0.031-0.047 lb. a.i.) + Refer to product labels for use rates. | Green Foxtail (1-2) Yellow Foxtail (1-2) Barnyardgrass (1-2) Wild Oat (1-2) Volunteer Cereals (1-2) | 1.5% | 1.5% |

⁽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 advised 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.

Directions for Use for Micro-Rate Applications to Sugar Beet Application Information

Multiple micro-rate applications of PS Clethodim in tank mixtures with reduced rates of desmedipham + phenmedipham or desmedipham and methylated seed oils may be applied by air or ground equipment to sugar beet to control early germinating annual grasses listed above. The rate of desmedipham + phenmedipham or desmedipham must not exceed 0.12 lb. a.i./A (broadcast application) when in combination with these spray adjuvants. Note that maximum rate allowed varies depending on crop growth stage. The use of wetting agents or spray adjuvants with conventional rates (0.73 to 1.22 lbs. a.i./A) or multiple low rate (0.24 to 0.73 lb. a.i./A) applications of desmedipham + phenmedipham or desmedipham is prohibited on the desmedipham + phenmedipham or desmedipham master label. Favorable climatic conditions (good conditions for plant growth and development) are essential for adequate weed control. All use precautions and restrictions on the desmedipham + phenmedipham or desmedipham master labels must be followed.

Directions for Using Micro-Rate Multiple Applications of PS Clethodim Tank Mixes

Apply PS Clethodim in broadcast applications only at a rate of 2 to 3 fl. oz./A (0.031-0.047 lb. a.i./A) in tank mixture with either desmedipham + phenmedipham or desmedipham following the directions for use on the tank mix partner label. A minimum of three sequential applications of 2 fl. oz./A (0.031 lb. a.i./A) or a minimum of 2 sequential applications of 3 fl. oz./A (0.047 lb. a.i./A) must be utilized for PS Clethodim tank mixtures. A minimum of 3 sequential applications of desmedipham + phenmedipham or desmedipham must be used. Accurate timing is essential; make initial application immediately after weeds emerge, and make repeat applications on 5- to 7-day intervals. If weed control is not adequate due to climatic conditions, spray coverage or other factors, return to conventional application rates of PS Clethodim (6 to 8 fl. oz./A (0.094-0.125 lb. a.i.)) and add rates of desmedipham + phenmedipham or desmedipham as directed on their label. When using conventional rates of desmedipham + phenmedipham or desmedipham in tank mixtures with PS Clethodim, a spray adjuvant is not advised.

Use Precautions for Micro-Rate Applications: (See PS Clethodim, desmedipham + phenmedipham and desmedipham master label for further use precautions.)

Not all weeds will be adequately controlled, even with favorable climatic conditions. Conventional rates of PS Clethodim, desmedipham + phenmedipham or desmedipham and/or hand labor may be required if multiple micro-rate applications do not adequately control weeds. Plugging of spray nozzles may be encountered due to the potential for formation of a precipitate in the spray solution that is often associated with micro-rate applications. To the extent consistent with applicable law, Prime Source, LLC will not be responsible for any nozzle plugging that may occur with the use of multiple micro-rate applications. Methylated seed oils must not be added if the desmedipham + phenmedipham or desmedipham rate exceeds 0.12 lb. ai./A broadcast, as the

addition of methylated seed oils could increase the possibility of crop injury at dosage rates greater than 0.12 lb. a.i./A.

RESTRICTION: DO NOT USE METHYLATED SEED OIL.

GROUND APPLICATION

Use of sufficient spray volumes and pressure is essential to ensure complete coverage. Use a minimum of 10 gals. and a maximum of 20 gals. of spray solution per acre. Spray pressures must reflect a minimum of 30 psi and a maximum of 60 psi at the nozzle. **DO NOT** use flood nozzles.

AERIAL APPLICATION

Use of sufficient spray volumes is essential to ensure complete coverage. Use a minimum of 5 gals. and a maximum of 15 gals. of spray solution per acre.

Table 15. TANK MIX APPLICATION OF PS CLETHODIM AND FUNGICIDES FOR CONTROL OF GRASS WEEDS AND DISEASES IN SUGAR BEET

| PRODUCT ⁽²⁾ | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE ⁽³⁾ (V/V) |
|------------------------------------|--|--|--|
| | ANNUAL GRASSES | PERENNIAL GRASSES | |
| PS Clethodim + tetraconazole | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the tetraconazole label for use rates. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + Refer to the tetraconazole label for use rates. | 1% |

⁽¹⁾ If grass regrowth occurs, or an additional flush of new grass emerges, make a second application of PS Clethodim alone (without a tank mix fungicide), according to the appropriate size and rate directions.

⁽²⁾ Refer to PS Clethodim and fungicide label for rates and weeds and diseases controlled.

⁽³⁾ Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

Table 16. TANK MIX APPLICATION OF PS CLETHODIM AND INSECTICIDES FOR CONTROL OF GRASS WEEDS AND INSECTS IN ALFALFA, COTTON, MINT (PEPPERMINT AND SPEARMINT TOPS), PEANUT (INCLUDING PERENNIAL), SOYBEAN AND SUNFLOWER

| PRODUCT ⁽²⁾ | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE (V/V) ⁽³⁾ | CROP | | | | | |
|--|--|--|--|------------------------|--------|------------------------|--------|---------|-----------|
| | ANNUAL GRASSES | PERENNIAL GRASSES | | Alfalfa ⁽⁴⁾ | Cotton | Mint ^{*(4,5)} | Peanut | Soybean | Sunflower |
| PS Clethodim + acephate | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the acephate label for use rates. | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the acephate label for use rates. | 1% | | X | X | X | | |
| PS Clethodim + acephate ⁽⁶⁾ | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the acephate label for use rates. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + Refer to the acephate label for use rates. | 1% | | X | X | X | X | |
| PS Clethodim + fenpropathrin | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the fenpropathrin label for use rates. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + Refer to the fenpropathrin label for use rates. | 1% | | X | | X | | |

| PRODUCT ⁽²⁾ | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE (V/V) ⁽³⁾ | CROP | | | | | |
|-----------------------------------|--|--|---|------------------------|--------|------------------------|--------|---------|-----------|
| | ANNUAL GRASSES | PERENNIAL GRASSES | | Alfalfa ⁽⁴⁾ | Cotton | Mint* ^(4,5) | Peanut | Soybean | Sunflower |
| PS Clethodim + esfenvalerate | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the esfenvalerate label for use rates. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + Refer to the esfenvalerate label for use rates. | 1% | | | | | | X |
| PS Clethodim + lambda-cyhalothrin | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the lambda-cyhalothrin label for use rates. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) + Refer to the lambda-cyhalothrin label for use rates. | 1% | | | | | | X |
| PS Clethodim + lambda-cyhalothrin | 10 to 16 fl. oz. ⁽⁷⁾ (0.156-0.25 lb. a.i.) + Refer to the lambda-cyhalothrin label for use rates. | 10 to 16 fl. oz. (0.156-0.25 lb. a.i.) + Refer to the lambda-cyhalothrin label for use rates. | 1% | X | | | | | |
| PS Clethodim + B-cyfluthrin | 10 to 16 fl. oz. ⁽⁷⁾ (0.156-0.25 lb. a.i.) + Refer to the B-cyfluthrin label for use rates. | 10 to 16 fl. oz. (0.156-0.25 lb. a.i.) + Refer to the B-cyfluthrin label for the use rates. | 1% | X | | | | | |
| PS Clethodim + dimethoate | 10 to 16 fl. oz. ⁽⁷⁾ (0.156-0.25 lb. a.i.) + Refer to the dimethoate label for use rates. | 10 to 16 fl. oz. ⁽⁷⁾ (0.156-0.25 lb. a.i.) + Refer to the dimethoate label for use rates. | 1% | X | | | | | |
| PS Clethodim + chlorpyrifos | 10 to 16 fl. oz. ⁽⁷⁾ (0.156-0.25 lb. a.i.) + Refer to the chlorpyrifos label for use rates. | 10 to 16 fl. oz. (0.156-0.25 lb. a.i.) + Refer to the chlorpyrifos label for use rates. | 1 to 2 pt. ⁽⁸⁾ | X | | | | | |
| PS Clethodim + permethrin | 10 to 16 fl. oz. ⁽⁷⁾ (0.156-0.25 lb. a.i.) + Refer to the permethrin label for use rates. | 10 to 16 fl. oz. (0.156-0.25 lb. a.i.) + Refer to the permethrin label for use rates. | 1% | X | | | | | |

* Peppermint and Spearmint tops

(1) If grass regrowth occurs, or an additional flush of new grass emerges, make a second application of PS Clethodim alone (without a tank mix fungicide), according to the appropriate size and rate directions.

(2) Refer to PS Clethodim and fungicide label for rates and weeds and diseases controlled.

(3) Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

(4) Certain insecticides may cause temporary phytotoxic symptoms on alfalfa and mint (peppermint and spearmint tops) foliage. Refer to the insecticide label for further information. It is suggested that prior to using any of these insecticides/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.

(5) The PS Clethodim rate must be 6 to 8 fl. oz./A (0.094-0.125 lb. a.i./A) for annual grass control in baby mint (peppermint and spearmint tops), minimum of 8 fl. oz./A (0.125 lb. a.i./A) for annual grass control in established mint (peppermint and spearmint tops) and 8 to 16 fl. oz./A (0.094-0.125 lb. a.i./A) for perennial grass control. Crop oil concentrate must be added at the rate of 1.0 to 2.0 pts./A.

(6) Insecticide tank mix use with acephate in soybean is permitted only in a state having an approved Section 24(c) registration for acephate use in soybean.

(7) The PS Clethodim rate must be 6 to 8 fl. oz./A (0.094-0.125 lb. a.i./A) for annual grass control in seedling alfalfa.

(8) For the PS Clethodim plus chlorpyrifos tank mix, reduce the adjuvant rate down to 1.0 pt./A when the chlorpyrifos rate is 1.0 pt./A or higher.

Table 17. ROUNDUP READY VOLUNTEER CORN CONTROL IN ROUNDUP READY SOYBEAN WITH PS CLETHODIM HERBICIDE TANK MIX

| Roundup Ready Volunteer Corn Height (Inches) | PS Clethodim Rate fl. oz./A | Glyphosate ⁽¹⁾ rate for formulations with built in adjuvant | Adjuvant |
|--|-----------------------------|---|---|
| <12 | 4 (0.063 lb. a.i.) | Refer to product label for use rates. | Non-ionic surfactant @ 0.125 to 0.25% v/v plus ammonium sulfate @ 8.5 to 17 lbs. per 100 gals./of carrier |
| 12 to 18 | 5 (0.078 lb. a.i.) | | |
| 18 to 24 | 6 (0.094 lb. a.i.) | | |

| Roundup Ready Volunteer Corn Height (Inches) | PS Clethodim Rate fl. oz./A | Glyphosate ⁽¹⁾ rate for formulations without built in adjuvant | Adjuvant |
|--|-----------------------------|--|--|
| <12 | 4 (0.063 lb. a.i.) | Refer to product label for use rates. | Crop oil concentrate @ 1 pt./A plus ammonium sulfate @ 8.5 to 17 lbs. per 100 gals. of carrier |
| 12 to 18 | 5 (0.078 lb. a.i.) | | |
| 18 to 24 | 6 (0.094 lb. a.i.) | | |

⁽¹⁾ Glyphosate formulation must be labeled for use on Roundup Ready soybean.

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

- Apply only to actively growing grass and broadleaf weeds at specified height or growth stage listed on each label.
- Apply under favorable soil moisture and humidity which exist a few days after rainfall or within seven days after irrigation.
- Tank mix applications may sometimes result in reduced grass control. If regrowth occurs, or an additional flush of new grass emerges, make a second application of PS Clethodim, as specified in the respective size and rate tables.
- This tank mix may be applied postemergence to ROUNDUP READY soybean up through the full flowering stage. Avoid contact with foliage, green stems, or fruit of crops, or any desirable plants and trees, other than soybean with the ROUNDUP READY gene as severe injury or destruction will result.

Restrictions

- **DO NOT** tank mix PS Clethodim when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.
- **DO NOT** apply less than 60 days before harvest.
- **DO NOT** allow the PS Clethodim plus ROUNDUP 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 including combinations of spray pressure and nozzle type that will result in fine particles (mist) that are likely to drift.

DIRECTIONS FOR FALLOW LAND

DIRECTIONS FOR USE

PS Clethodim 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 PS Clethodim at 6 to 8 fl. oz./A (0.094-0.125 lb. a.i./A) for annual grasses and 8 to 16 fl. oz./A (0.125-0.25 lb.a.i./A) for perennial grasses. When both grass and broadleaf weeds are the target pest, PS Clethodim may be tank mixed with 2,4-D ester for broad spectrum control. When both annual and perennial grasses occur in the same field, use a minimum of 8 fl. oz./A (0.125 lb. a.i./A) PS Clethodim rate.

PRODUCT INFORMATION:

- 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 Annual and Perennial Grasses section of this label.
- Annual grasses that emerge after the PS Clethodim 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 8 fl. oz./A (0.125 lb. a.i./A) per application to Annual Grasses and 16 fl. oz./A (0.25 lb. a.i./A) per application to Perennial Grasses.
- **DO NOT** exceed 5 applications at the 6 fl. oz. (0.094 lb. a.i./A) use rate for Annual Grasses and do not exceed 4 applications at the 8 fl. oz. (0.125 lb. a.i./A) rate for Perennial Grasses.
- For repeat applications make on a minimum of a 14 day interval.
- **DO NOT** apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year.
- **DO NOT** plant any crop for 30 days after application unless clethodim is registered for use in that crop.
- **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 PS Clethodim application.

Table 18. PS CLETHODIM IN TANK MIXES TO CONTROL ANNUAL AND PERENNIAL GRASSES IN FALLOW LAND

| PRODUCT | APPLICATION RATES/ACRE ⁽¹⁾ | | CROP OIL CONCENTRATE ⁽³⁾ (V/V) | |
|---|---|--|--|-----|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| PS Clethodim + 2,4-D ester or dicamba | 6 to 8 fl. oz. (0.094-0.125 lb. a.i.) + Refer to the 2,4-D label for use rates. or See dicamba label for use rates. | 8 to 16 fl. oz. (0.125-0.25 lb. a.i.) | 1% | 1% |

⁽¹⁾ Refer to PS Clethodim label for weed height and species control. Review 2,4-D labels for crop restrictions, use rates and weeds controlled.

⁽²⁾ Always use a crop oil concentrate or methylated seed oil containing at least 15% emulsifier at the listed rate (but not less than 1 pt./A) in the finished spray volume.

Table 19. PS CLETHODIM FOR THE CONTROL AND/OR SUPPRESSION OF TALL FESCUE IN NATIVE PRAIRIE WARM-SEASON GRASS RESTORATION PROJECTS

| PRODUCT | PRODUCT RATES | GRASS WEEDS CONTROLLED/SUPPRESSED | WEED STAGES |
|---------|---------------|-----------------------------------|-------------|
|---------|---------------|-----------------------------------|-------------|

| | | Common Name | Scientific Name | |
|---|--|-------------|----------------------------|--|
| PS Clethodim | 10 to 12 fl. oz./A (0.156-0.188 lb. a.i.) | Tall Fescue | <i>Festuca arundinacea</i> | 4 to 6 inches tall (40 to 60% green-up) |
| ADJUVANT: PS Clethodim must be applied with crop oil concentrate at 1 qt./A, plus a spray grade ammonium sulfate at 2.5 to 4 lbs./A. | | | | |
| MIXING ORDER: Thoroughly mix spray grade ammonium sulfate in water, add PS Clethodim, then add crop oil concentrate. | | | | |

SPECIAL APPLICATION INSTRUCTIONS/ RESTRICTIONS/ 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 PS Clethodim 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 PS Clethodim to emerged warm-season grasses may cause injury. **DO NOT** apply to warm-season grasses grown for seed. **DO NOT** graze treated fields or feed treated forage and or hay to livestock. **DO NOT** plant any crop for 30 days after application, unless clethodim is registered for use in that crop.

NOTE: PS Clethodim applications are most effective if applied when average nighttime temperatures are consistently greater than or equal to 47°F.

Table 20. PS CLETHODIM FOR THE SUPPRESSION OF TALL FESCUE SEED-HEADS IN NON-PRODUCING AGRICULTURAL AREAS

| PRODUCT | PRODUCT RATE | SUPPRESSION | APPLICATION TIMING |
|---|--|--|----------------------------------|
| PS Clethodim | 1 1/2 to 2 fl. oz./A (0.023-0.031 lb. a.i.) | Tall Fescue Seed-Heads (<i>Festuca arundinacea</i>) | (50 to 90% Tall Fescue green-up) |
| ADJUVANT: PS Clethodim must be applied with crop oil concentrate at 1 qt./A, plus a spray grade ammonium sulfate at 2.5 to 4 lbs./A. | | | |
| MIXING ORDER: Thoroughly mix spray grade ammonium sulfate in water, add PS Clethodim Herbicide, then add crop oil concentrate. | | | |

SPECIAL APPLICATION INSTRUCTIONS/ RESTRICTIONS/ PRECAUTIONS

Apply at 50 to 90% tall fescue green-up.

Use the higher PS Clethodim rate if less tall fescue green matter is present.

DO NOT mow area for two weeks after the PS Clethodim 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 nozzles.

2,4-D ester may be added to this tank mix for broadleaf control (see 2,4-D ester label for weeds controlled).

DO NOT graze treated fields or feed treated forage and/or hay to livestock. **DO NOT** plant any crop for 30 days after application, unless clethodim is registered for use in that crop.

DIRECTIONS FOR USE IN ORNAMENTALS

For ornamental plant uses, PS Clethodim can be used to control labeled grass weeds in greenhouses, bathhouses, shadehouses, and around outdoor ornamentals, including nurseries, parks, roadside plantings, and structure landscapes. The plants listed below have been tested for use with PS Clethodim applications. See tables with listed ornamentals (ornamental trees, ground covers, garden flowers and plants, and shrubs).

Use Rates Per Acre: 6-16 fl. oz. (0.094-0.25 lb. a.i.)

Special Use Instructions

Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gals (0.25% v/v).

Use of crop oil concentrate is not advised since it may injure flowers and foliage.

For repeat application make on a minimum of a 14 day interval.

IMPORTANT

PS Clethodim successfully controls weeds in newly transplanted and established non-grassy ornamentals. Plant resistance to PS Clethodim 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 advised 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 PS Clethodim have investigated the safety factor to ornamental plants not listed on the label.

The following plants have shown a resistance for PS Clethodim applications:

ORNAMENTAL TREES

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

GROUND COVERS

| COMMON NAME | SCIENTIFIC NAME |
|--------------------|-------------------------------|
| 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>Ophiopogon japonicas</i> |
| Periwinkle, Lesser | <i>Vinca minor</i> |

GARDEN FLOWERS AND PLANTS

| COMMON NAME | SCIENTIFIC NAME |
|-----------------|-----------------------------|
| Ageratum | <i>Ageratum</i> spp. |
| Alyssum*, Sweet | <i>Lobularia maritima</i> |
| Asparagus Fern | <i>Asparagus setaceus</i> |
| Bleeding Heart | <i>Dicentra spectabilis</i> |
| Cast Iron Plant | <i>Aspidistra elatior</i> |
| Chrysanthemum | <i>Chrysanthemum</i> spp. |
| Cinquefoil | <i>Potentilla</i> spp. |

| COMMON NAME | SCIENTIFIC NAME |
|-------------------------|--------------------------------|
| Coleus | <i>Coleus</i> spp. |
| Coralbells | <i>Heuchera sanguinea</i> |
| Cranesbill | <i>Geranium</i> spp. |
| Dahlia | <i>Dahlia</i> spp. |
| Daisy, Trailing African | <i>Osteospermum fruticosum</i> |
| Daylily | <i>Hemerocallis</i> spp. |
| Dusty Miller | <i>Senecio cineraria</i> |
| Euonymus | <i>Euonymus</i> spp. |
| Gazania | <i>Gazania</i> spp. |
| Geranium, House | <i>Pelargonium hortorum</i> |
| Heather, False | <i>Cuphea hyssopifolia</i> |
| Hosta | <i>Hosta fortunei</i> |
| Iris | <i>Iris</i> spp. |
| Jasmine Tobacco | <i>Nicotiana alata</i> |
| Loosestrife | <i>Lythrum salicaria</i> |
| Marigold | <i>Tagetes</i> spp. |
| Partridgeberry | <i>Mitchella repens</i> |
| Petunia* | <i>Petunia hybrida</i> |
| Phlox | <i>Phlox</i> spp. |
| Pinks | <i>Dianthus</i> spp. |
| Portulaca | <i>Portulaca grandiflora</i> |
| Salvia | <i>Salvia</i> spp. |
| Saxifrage | <i>Saxifrage</i> spp. |
| Sedum | <i>Sedum</i> spp. |
| Selloum | <i>Philodendron selloum</i> |
| Snapdragon* | <i>Antirrhinum majus</i> |
| Sweet Flag | <i>Acorus gramineus</i> |
| Tickseed | <i>Coreopsis grandiflora</i> |
| Touch-Me-Not | <i>Impatiens</i> spp. |
| Verbena | <i>Verbena</i> spp. |
| Violet | <i>Viola</i> spp. |
| Yarrow, Common | <i>Achillea millefolium</i> |
| Zinnia | <i>Zinnia elegans</i> |

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

SHRUBS

| COMMON NAME | SCIENTIFIC NAME |
|--------------------|-----------------------------|
| Abelia | <i>Abelia</i> spp. |
| Anise, Purple | <i>Illicium floridanum</i> |
| Aucuba | <i>Aucuba</i> spp. |
| Azalea* | <i>Rhododendron</i> spp. |
| Bamboo | <i>Bambusa</i> spp. |
| Barberry, Japanese | <i>Berberis thunbergii</i> |
| Barberry, Magellan | <i>Berberis buxifolia</i> |
| Bayberry | <i>Myrica pensylvanica</i> |
| Bottlebrush | <i>Callistemon citrinus</i> |
| Boxwood, Common | <i>Buxus sempervirens</i> |
| Camellia, Common | <i>Camellia japonica</i> |
| Candytuft | <i>Iberis sempervirens</i> |
| Cleyera | <i>Cleyera japonica</i> |
| Coralberry | <i>Ardisia crenata</i> |
| Crape Myrtle | <i>Lagerstroemia indica</i> |
| Coyote Brush | <i>Baccharis pilularis</i> |
| Fig, Creeping | <i>Ficus pumila</i> |

| COMMON NAME | SCIENTIFIC NAME |
|---------------------------|------------------------------------|
| Gardenia | <i>Gardenia</i> spp. |
| Holly | <i>Ilex</i> spp. |
| Honeysuckle | <i>Lonicera</i> spp. |
| Indian Hawthorn | <i>Raphiolepis indica</i> |
| Jasmine | <i>Jasminum</i> spp. |
| Jasmine, Asiatic | <i>Trachelospermum asiaticum</i> |
| Jasmine, Star | <i>Trachelospermum jasminoides</i> |
| Juniper | <i>Juniperus</i> spp. |
| Lantana | <i>Lantana</i> spp. |
| Nandina* Bamboo, Heavenly | <i>Nandinia domestica</i> |
| Oleander, Common | <i>Nerium oleander</i> |
| Oregon Grape | <i>Mahonia aquifolium</i> |
| Photinia | <i>Photinia</i> spp. |
| Pittosporum | <i>Pittosporum</i> spp. |
| Podocarpus | <i>Podocarpus</i> spp. |
| Privet | <i>Ligustrum</i> spp. |
| Pyracantha | <i>Pyracantha</i> spp. |
| Rhododendron | <i>Rhododendron</i> spp. |
| Rose | <i>Spiraea bumalda</i> |
| Sweet Olive | <i>Osmanthus fragrans</i> |
| Viburnum | <i>Viburnum tinus</i> |
| Wisteria | <i>Wisteria</i> spp. |
| Yellow Sage/Shrub Verbena | <i>Lantana camara</i> |

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

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 and 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.

Restrictions

- **DO NOT** apply more than 16 fl. oz./A (0.25 lb. a.i./A) per application.
- **DO NOT** make more than 4 applications per acre per year.
- **DO NOT** apply more than 64 fl. oz./A (1.0 lb. a.i./A) per year.
- For repeat application make on a minimum of a 14 day interval.

| GRASS SPECIES | SCIENTIFIC NAME | WEED* HEIGHT INCHES | RATE FL. OZ./ACRE ⁽¹⁾ | HIGH RATE ⁽²⁾ |
|-----------------------|---------------------------------|---------------------|----------------------------------|--------------------------|
| Barnyardgrass | <i>Echinochloa crusgalli</i> | 2 to 8 | 8 | 16 |
| Broadleaf Signalgrass | <i>Brachiaria platyphylla</i> | 2 to 6 | 8 | 16 |
| Brome | | | | |
| California | <i>Bromus carinatus</i> | 2 to 6 | 8 | 16 |
| Cheat | <i>Bromus secalinus</i> | 2 to 6 | 8 | 16 |
| Downy | <i>Bromus tectorum</i> | 2 to 6 | 8 | 16 |
| Ripgut | <i>Bromus diandrus</i> | 2 to 6 | 8 | 16 |
| Canarygrass | <i>Phalaris canariensis</i> | 1 to 4 | 8 | 16 |
| Crabgrass | | | | |
| Hairy | <i>Digitaria adscendens</i> | 2 to 6** | 8 | 16 |
| Large | <i>Digitaria sanguinalis</i> | 2 to 6** | 8 | 16 |
| Smooth | <i>Digitaria ischaemum</i> | 2 to 6** | 8 | 16 |
| Southern | <i>Digitaria ciliaris</i> | 2 to 6** | 8 | 16 |
| Crowfootgrass | <i>Dactyloctenium aegyptium</i> | 2 to 6** | 8 | 16 |

| GRASS SPECIES | SCIENTIFIC NAME | WEED* HEIGHT INCHES | RATE FL. OZ./ACRE ⁽¹⁾ | HIGH RATE ⁽²⁾ |
|-------------------------|--------------------------------|---------------------|----------------------------------|--------------------------|
| Fall Panicum | <i>Panicum dichotomiflorum</i> | 2 to 8 | 8 | 16 |
| Field Sandbur | <i>Cenchrus incertus</i> | 2 to 6 | 8 | 16 |
| Foxtail | | | | |
| Giant | <i>Setaria faberi</i> | 2 to 12 | 8 | 16 |
| Green | <i>Setaria viridis</i> | 2 to 8 | 8 | 16 |
| Yellow | <i>Setaria glauca</i> | 2 to 8 | 8 | 16 |
| Goosegrass | <i>Eleusine indica</i> | 2 to 6** | 8 | 16 |
| Itchgrass | <i>Rottboellia cochin</i> | 2 to 6 | 8 | 16 |
| Junglerice | <i>Echinochloa colona</i> | 2 to 6 | 8 | 16 |
| Lovegrass (Stinkgrass) | <i>Eragrostis cilianensis</i> | 2 to 6 | 8 | 16 |
| Rabbitsfootgrass | <i>Polypogon monspeliensis</i> | 1 to 4 | 8 | 16 |
| Red Rice | <i>Oryza sativa</i> | 1 to 3 | 8 | 16 |
| Ryegrass | | | | |
| Hardy | <i>Lolium remotum</i> | 2 to 6 | 8 | 16 |
| Italian | <i>Lolium multiflorum</i> | 2 to 6 | 8 | 16 |
| Seedling Johnsongrass | <i>Sorghum halepense</i> | 4 to 10 | 8 | 16 |
| Shattercane | <i>Sorghum bicolor</i> | 6 to 18 | 8 | 16 |
| Southwestern Cupgrass | <i>Eriochloa gracilis</i> | 2 to 6 | 8 | 16 |
| Sprangletop | | | | |
| Amazon | <i>Leptochloa panicoides</i> | 2 to 6 | 8 | 16 |
| Bearded | <i>Leptochloa fascicularis</i> | 2 to 6 | 8 | 16 |
| Mexican | <i>Leptochloa uninervia</i> | 2 to 6 | 8 | 16 |
| Red | <i>Leptochloa filiformis</i> | 2 to 6 | 8 | 16 |
| Texas Panicum | <i>Panicum texanum</i> | 2 to 6 | 8 | 16 |
| Volunteer Cereals | | | | |
| Barley | <i>Hordeum vulgare</i> | 2 to 6 | 8 | 16 |
| Oats | <i>Avena sativa</i> | 2 to 6 | 8 | 16 |
| Rye | <i>Secale cereale</i> | 2 to 6 | 8 | 16 |
| Wheat | <i>Triticum aestivum</i> | 2 to 6 | 8 | 16 |
| Volunteer Corn | <i>Zea mays</i> | 4 to 12 | 6 | 8 |
| Volunteer Corn | <i>Zea mays</i> | 12 to 24 | 8 | 16 |
| Volunteer Grain Sorghum | <i>Sorghum bicolor</i> | 8 to 12 | 8 | 16 |
| Wild Oats | <i>Avena fatua</i> | 2 to 6 | 8 | 16 |
| Wild Proso Millet | <i>Panicum miliaceum</i> | 2 to 10 | 8 | 16 |
| Witchgrass | <i>Panicum capillare</i> | 2 to 8 | 8 | 16 |
| Woolly Cupgrass | <i>Eriochloa villosa</i> | 2 to 8 | 8 | 16 |

* Generally occurs between 3-leaf stage and tillering.

** Length of lateral growth.

⁽¹⁾ 8 fl. oz./A (0.125 lb. a.i./A) = approximately 0.2 fl. oz./1,000 sq. ft.

⁽²⁾ 16 fl. oz./A (0.25 lb. a.i./A) = approximately 0.4 fl. oz./1,000 sq. ft.

Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v).

DIRECTIONS FOR ANNUAL BLUEGRASS CONTROL WITH PS CLETHODIM IN ORNAMENTALS

| GRASS SPECIES | WEED STAGE | RATE FL. OZ./ACRE | HIGH RATE |
|--|------------|-----------------------|-----------------------|
| Annual Bluegrass (<i>Poa annua</i>) | to 4-leaf | 6 (0.094 lb. a.i.) | 16 (0.25 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 a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v).

Restrictions

- **DO NOT** apply more than 16 fl. oz./A (0.25 lb. a.i./A) per application.
- **DO NOT** make more than 4 applications at the lowest rate, 6 fl. oz. (0.094 lb. a.i./A), or 2 applications at the highest rate, 16 fl. oz. (0.25 lb. a.i./A), per acre per year.
- For repeat applications make on a minimum of a 14 day interval.
- **DO NOT** apply more than 32 fl. oz./A (0.5 lb. a.i./A) per year.

DIRECTIONS FOR PERENNIAL GRASSES

- 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.

Restrictions

- **DO NOT** apply more than 16 fl. oz./A (0.25 lb. a.i./A) 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 32 fl. oz./A (0.5 lb. a.i./A) per year.

| GRASS SPECIES | WEED HEIGHT (inches) | RATE FL. OZ./ACRE ⁽¹⁾ | HIGH RATE ⁽²⁾ |
|--|-------------------------|----------------------------------|--------------------------|
| Bermudagrass (<i>Cynodon dactylon</i>) | | | |
| First Application | 3 (or up to 6" runners) | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 3 (or up to 6" runners) | 8 | 16 |
| Quackgrass (<i>Elytrigia repens</i>) | | | |
| First Application | 4 to 8 | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 4 to 8 | 8 | 16 |
| Rhizome Johnsongrass (<i>Sorghum halepense</i>) | | | |
| First Application | 12 to 24 | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 6 to 18 | 6 | 8 |
| Wirestem Muhly (<i>Muhlenbergia frondosa</i>) | | | |
| First Application | 4 to 8 | 8 | 16 |
| Repeat Application(s) (if regrowth occurs) | 4 to 8 | 8 | 16 |

⁽¹⁾ 8 fl. oz./A (0.125 lb. a.i./A) = approximately 0.2 fl. oz./1,000 sq. ft.

⁽²⁾ 16 fl. oz./A (0.25 lb. a.i./A) = approximately 0.4 fl. oz./1,000 sq. ft.

Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v)

STORAGE AND DISPOSAL

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

Open dumping is prohibited.

PESTICIDE STORAGE

Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in cool, dry place. Do not store diluted spray.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING**[NONREFILLABLE CONTAINERS]**

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

(Nonrefillable plastic container \leq 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Nonrefillable plastic container $>$ 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Nonrefillable metal container $>$ 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

[REFILLABLE CONTAINERS]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

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

Prime Source, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Prime Source, LLC, and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, PRIME SOURCE, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

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