



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

March 27, 2024

Don O'Shaughnessy
Agent for Agromarketing Company, Inc
D O'Shaughnessy Consulting, Inc.
206 Traditions Blvd.
Bowling Green, Kentucky 42103

Subject: Approval of Label Amendment; Only Indicated Changes Reviewed – Correcting tree nut rate
Product Name: Clethodim 2 EC Herbicide
EPA Registration Number: 87845-7
Application Date: January 10, 2023
Case Number: 00475592

Dear Don O'Shaughnessy:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. However, EPA reviewed only the label changes highlighted, marked, or otherwise indicated on the submitted label. Any other changes to the previously approved label that were not clearly highlighted, marked, or otherwise indicated in your submission were not reviewed and may form the basis of regulatory and/or enforcement action if later discovered by the Agency. Further, submission of a label amendment application with unidentified changes may be considered a knowing submission of false information to the Agency. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

The label submitted with the application has been stamped "Accepted Only Indicated Revisions Reviewed" and is enclosed for your records.

This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 C.F.R. § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 C.F.R. § 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website contains any false or misleading statement, design, or graphic, the product may be misbranded and unlawful to sell or distribute under FIFRA Sections 2(q)(1)(A) and 12(a)(1)(E). 40 C.F.R. § 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on the product label, claims made as part of the product's sale or distribution may not substantially differ from those claims approved through the registration process under FIFRA Section 12(a)(1)(B). 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 product will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of the product 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.

If you have any questions, please contact Lindsay DeMers at demers.lindsay@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Lydia Crawford".

Lydia Crawford, Acting Product Manager 24
Fungicide and Herbicide Branch
Registration Division (7505T)
Office of Pesticide Programs

Enclosure: stamped "accepted" label

ACCEPTED

ONLY INDICATED

REVISIONS REVIEWED

03/27/2024

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

87845-7

No label revisions other than those indicated were
reported to the Agency.

CLETHODIM

GROUP

1

HERBICIDE

CLETHODIM 2 EC HERBICIDE

Active Ingredient

*Clethodim..... 26.4%

Other Ingredients..... 73.6%

Total..... 100.0%

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

Contains Petroleum Distillates

Contains 2.0 lbs. clethodim per gallon

KEEP OUT OF REACH OF CHILDREN

WARNING AVISO

SEE FOLLOWING PAGES FOR ADDITIONAL PRECAUTIONARY STATEMENTS

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.)

Manufactured for:

Agromarketing Company, Inc.

314 Estate Court

Midland, ON, Canada, L4R 5H2

913-416-0962

EPA Reg. No. 87845 -7

EPA Est. No.

NET CONTENTS _____

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & 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.

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.• 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 by the 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 mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-892-0099 for emergency medical treatment information.	
NOTE TO PHYSICIANS	
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.	

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear: long-sleeved shirt and long pants, chemical-resistant gloves such as 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 hands thoroughly with soap and water after handling, 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.

NON-TARGET ORGANISM ADVISORY STATEMENT

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

PHYSICAL OR CHEMICAL HAZARDS:

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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

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

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

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, chemical-resistant gloves, such as 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 Standards 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.

Weed Resistance Management

For resistance management, Clethodim 2 EC Herbicide is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to Clethodim 2 EC Herbicide and other Group 1 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of Clethodim 2 EC Herbicide or other Group 1 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed- competitive crops or varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Agromarketing Company at 416-628 5174 or www.agromarketing.ca

PRODUCT INFORMATION

RESTRICTIONS

- Application on Long Island, New York, is restricted to no more than 16 fl oz of Clethodim 2 EC Herbicide (0.25 lb ai) per acre per year.
- 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 Clethodim 2 EC Herbicide or reduced grass control may result.
- Do not apply under conditions of stress. Applying Clethodim 2 EC Herbicide 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 Clethodim 2 EC Herbicide effectively, and will be less susceptible to herbicide activity.
- Do not allow Clethodim 2 EC Herbicide 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.

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

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

Wild Rice: Hays County, Texas.

ROTATIONAL RESTRICTIONS

Do not plant rotational crops until 30 days after application of Clethodim 2 EC Herbicide unless the crop is listed on Clethodim 2 EC Herbicide label.

PRECAUTIONS

- Grass crops including corn, rice, sorghum, small grains, or turf, etc. are highly sensitive to Clethodim 2 EC Herbicide.
- Clethodim 2 EC Herbicide may not be used on vegetable crops being grown for seed production unless specific use directions are provided.
- Clethodim 2 EC Herbicide is a selective postemergence herbicide for control of annual and perennial grasses.
- Clethodim 2 EC Herbicide 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, 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 2 Clethodim 2 EC Herbicide 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 Clethodim 2 EC Herbicide, not all specialty varieties of these crops have been tested. It is advised that, before applying Clethodim 2 EC Herbicide 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 Clethodim 2 EC Herbicide and broadleaf herbicides may result in reduced grass

control. If grass regrowth occurs, an additional application Clethodim 2 EC Herbicide may be necessary. **AVOID SPRAY DRIFT.**

- Repeated use of Clethodim 2 EC Herbicide (or other grass herbicide of Group 1) 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

Timing of Applications

Apply Clethodim 2 EC Herbicide postemergence to actively growing grasses according to prescribed rates in the table. Applications made to grass plants stressed by insufficient moisture, or hot or cold temperatures, or to grass plants exceeding specified growth stages may result in unsatisfactory control.

Do not apply under these conditions.

In arid regions where irrigation is used to supplement limited rainfall, apply Clethodim 2 EC Herbicide as soon as possible, after irrigation (within 7 days). In arid regions, a second application of Clethodim 2 EC Herbicide 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 Clethodim 2 EC Herbicide may reduce weed control.

DO NOT APPLY Clethodim 2 EC Herbicide if rainfall is expected within one hour, since control may be reduced.

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.

ADDITION OF ADJUVANT OR CROP OIL CONCENTRATE

CROP	ADJUVANT DIRECTIONS
Alfalfa, Cotton, Bean (dry) & Pea (shelled), Edible Podded Legume Vegetables, Peanuts (including perennial), Potato, Soybean, Bean & Pea (succulent shelled), Sugar Beet and Sunflower	<p>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.</p> <p>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 Clethodim 2 EC Herbicide 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.</p>

Asparagus, Berry (low-growing), Canola, Carrot, Clover, Cranberry, Cucurbits, Flax, Fruiting Vegetables (except okra and tomato), Garden Beet, Garlic, Head & Stem Brassica Vegetables, Herbs, Hops, Leaf Petioles, Leafy Brassica Greens, Leafy Greens, Peppermint and Spearmint tops, Mustard Seed, Okra, Onion (dry bulb), Green Onion, Pome Fruit, Root Vegetables, Safflower, Sesame, Stalk and Stem Vegetable, Stone Fruit, Strawberry, Stevia (dried leaves), Sweet Potato (Yam & other Tuberous and Corm Vegetables except Potato), Tomato, Tree Nuts and Watercress	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 Fruit and Nut 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. Maintain spray pressure at a minimum of 30 psi and a maximum of 60 psi at the nozzle.

Do not use flood nozzles.

Make applications to onions (dry bulb), green onion and garlic 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 bulb), green onion or garlic: When applying by air do not exceed 8 fl oz/A (0.125 lb ai / A) in a single application. In California, make air applications to onions or garlic in a minimum of 20 gals of spray solution per acre. In states other than California, make air application to onions or garlic in a minimum of 10 gals of spray solution per acre.

NOTE: Crop injury may occur when Clethodim 2 EC Herbicide is applied to onions or garlic 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 or 0.005 to 0.1 lb ai / A) Clethodim 2 EC Herbicide 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 Clethodim 2 EC Herbicide 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), GREEN ONION AND GARLIC SPRINKLER IRRIGATION APPLICATION

Only apply Clethodim 2 EC Herbicide by chemigation to Onions (dry bulb and green) and Garlic crops. May be applied to onions and garlic by sprinkler irrigation systems.

Apply Clethodim 2 EC Herbicide at the high rate for annual grasses (16 fl oz per acre) when the grass height is at the low end of the range (application to larger grasses may not provide adequate control). Add a crop oil concentrate containing at least 15% emulsifier at 1 quart per acre.

Apply Clethodim 2 EC Herbicide 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 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 Clethodim 2 EC Herbicide 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.

Restrictions

- **Do not apply Clethodim 2 EC Herbicide 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.
- Do not apply by chemigation to any other crop, or to this crop using any other type of irrigation system.
- Do not apply Clethodim 2 EC Herbicide 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.
- Do not apply this product through any other type of irrigation system (i.e. Public Irrigation System).
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label-prescribed safety devices for public water supplies are in place.
- 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 if the need arises.
- 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.

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.
- 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.

Precautions

- 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, contact your State Extension Service specialists, equipment manufacturers or other experts.

MANDATORY SPRAY DRIFT

Aerial Application

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotorblade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Ground Boom Applications

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy. For all other ground applications, the nozzle must be no more than 3 feet from the target vegetation.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size – Ground Boom

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

Controlling Droplet Size – Aircraft

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

BOOM HEIGHT – Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT – Aircraft

Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

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

WIND

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

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

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC HERBICIDE

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 to 0.25 lb ai /A)	1 qt by ground or 1% v/v (but not less than 1 pt/A) by air ⁽⁵⁾	Refer to tank mix partners for feeding, grazing and harvesting restrictions. ^(5,6) The addition of Ammonium Sulfate (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 (0.250 lb ai) per acre per application. Do not make more than 2 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.
Bean, Dry except Soybean [Dried Shelled Pea and Bean (except soybean)] Subgroup 6C] including: Bean (Lupinus spp.) Grain Sweet White White Sweet Bean (Phaseolus spp.) Field Kidney Lima (dry) Navy Pinto Tepary Bean (Vigna spp.) Adzuki Bean Black-eyed Pea Catjang Cowpea Crowder Pea Moth Bean Mung Bean Rice Bean Southern Pea Urd Bean Broad (dry) Chickpea (garbanzo) Guar Lablab Bean Lentil	30 days	6-16 fl oz (0.094 to 0.25 lb ai /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 Ammonium Sulfate (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 (0.250 lb ai) per acre per application. Do not make more than 2 applications at 16 fl oz (0.250 lb ai) per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For Reduced Rate Control for Small Annual Grasses: Do not make more than 8 applications at 4 fl oz (0.0625 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Bean, Succulent Shelled [Succulent Shelled Pea and Bean Subgroup 6B] including: Bean (Phaseolus spp.) Broad Bean (succulent) Lima Bean (green) Bean (Vigna spp.) Black-eyed Pea Cowpea Southern Pea	21 days	6-8 fl oz (0.094 to 0.125 lb ai /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 prescribed 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 (0.125 lb ai) per acre per year. • Do not make more than 1 application per acre per year. except as indicated below for Reduced Rate Control for Annual Grasses • For Reduced Rate Control for Small Annual Grasses: Do not make more than 2 applications at 4 fl oz (0.0625 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.
Beet, Garden	30 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> • Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops ⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre ⁽²⁾	Special Use Instructions
Berry Low Growing (except Cranberry and Strawberry) Subgroup 13-07G including: Bearberry Bilberry Blueberry, lowbush Cloudberry Lingonberry Muntries Partridgeberry	45 days	4-8 fl oz (0.0625 to 0.125 lb ai /A)	Non-ionic surfactant (NIS) at 0.25% v/v	<p>Verify crop safety to Clethodim 2 EC Herbicide on a small area of the crop, at the desired Clethodim 2 EC Herbicide 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, Clethodim 2 EC Herbicide 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 (0.125 lb ai) per acre per application. Do not make more than 4 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.
Brassica Head and 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 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	<p>Restrictions</p> <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not apply more than 4 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Brassica Leafy Greens [Subgroup 4-16B][*] (except Radish Leaves, Turnip Greens and Watercress) including: Arugula Broccoli, Chinese Broccoli Raab Cabbage, Abyssinian Cabbage, Chinese (bok choy) Cabbage, Sea kale Collards Cress, Garden Cress, Upland Hanover Salad Kale Maca (leaves) Mizuna Mustard Greens Rape Greens Rocket, Wild Shepherd's Purse cultivars, varieties, and/or hybrids of these commodities	14 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not apply more than 4 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.
Canola including Rapeseed Subgroup 20A except flax seed, mustard seed and sesame seed [(Not for use in California)] Borage Crambe Cuphea Echium Gold of Pleasure (Camelina) Hare's Ear Mustard Lesquerella Lunaria Meadowfoam Milkweed Oil Radish Poppy seed Rapeseed (canola) Sweet Rocket	70 days	4-6 fl oz (0.0625 to 0.094 lb ai / A)	1% v/v in the finished spray volume.	Verify crop safety to Clethodim 2 EC Herbicide on a small area of the crop, at the desired Clethodim 2 EC Herbicide 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, Clethodim 2 EC Herbicide may be used on the entire field at the rate tested and with the same NIS used in the crop safety test. Restrictions <ul style="list-style-type: none"> Do not apply more than 6 fl oz (0.094 lb ai) per acre per application. For Annual and Perennial Grasses: Do not make more than 1 application at 6 fl oz (0.094 lb ai) per acre per year. For Reduced Rate Control for Small Annual Grasses: Do not make more than 1 application at 4 fl oz (0.0625 lb ai) per acre per year. Do not apply after crop has begun bolting. Crop injury may occur when Clethodim 2 EC Herbicide is applied during the bloom period.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Carrot	30 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not make more than 4 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.
Clover	15 days before grazing, feeding, or harvesting (cutting) for forage or hay	6-16 fl oz (0.094 to 0.25 lb ai /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> Restrictions <ul style="list-style-type: none"> Do not apply more than 16 fl oz (0.250 lb ai) per acre per application. Do not make more than 1 application per acre per year. Do not exceed 16 fl oz (0.250 lb ai) per acre per year.
Cotton (including cotton grown for seed)	60 days	6-16 fl oz (0.094 to 0.25 lb ai /A)	1 qt by ground or 1% v/v (but not less than 1 pt/A) by air. ⁽³⁾	<p>The addition of Ammonium Sulfate (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> Restrictions <ul style="list-style-type: none"> Do not apply more than 16 fl oz (0.250 lb ai) per acre per application. Do not make more than 2 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. Do not graze treated fields or feed treated forage or hay to livestock. For repeat applications make on a minimum of a 14 day interval.
Cranberry	30 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not make more than 4 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. Do not apply between the "hook" stage and full fruit set. For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Fallow Land Conifer Trees (and other non-producing agricultural areas) Non-Crop or Non-Planted Areas	N/A	6-16 fl oz (0.094 to 0.25 lb ai /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.	Restrictions <ul style="list-style-type: none"> Do not apply more than 16 fl oz (0.250 lb ai) per acre per application. Do not make more than 2 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. Do not plant any crop for 30 days after application unless clethodim is registered for use in that crop. For repeat applications make on a minimum of a 14 day interval.
Flax (Not for use in California)	60 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Apply prior to bloom. Crop injury may occur when Clethodim 2 EC Herbicide is applied during the bloom period. Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not make more than 2 applications per acre per year except as indicated below for Reduced Rate Control for Annual Grasses Do not apply more than 16 fl oz (0.250 lb ai) per acre per year. For Reduced Rate Control for Small Annual Grasses: Do not make more than 4 applications at 4 fl oz (0.0625 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Fruiting Vegetables (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 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> • Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
[Subgroup 19A] Herbs including: Angelica Balm Basil Borage Burnet Camomile Catnip Chervil (dried) Chive Chive, Chinese Clary Coriander (leaf) Costmary Culantro (leaf) Curry (leaf) Dill (dillweed) Horehound Hyssop Lavender Lovage (leaf) Marigold Marjoram (Origanum spp.) Nasturtium Parsley (dried) Pennyroyal Rosemary Rue Sage Savory, Summer and Winter	14 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	<p>Clethodim 2 EC Herbicide has not been tested on all herbs, and herb varieties. It is the responsibility of the user to test Clethodim 2 EC Herbicide on a small portion of the crop to be treated before treating the entire field.</p> <p>Verify crop safety to Clethodim 2 EC Herbicide on a small area of the crop, at the desired Clethodim 2 EC Herbicide rate and with the same crop oil concentrate that will be used on the field. If no crop response is evident 7 days after treatment, Clethodim 2 EC Herbicide 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 8 fl oz (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.
Hops	21 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	<p>Restrictions</p> <ul style="list-style-type: none"> • Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
[Subgroup 22B] Leaf Petiole Vegetables[*] including: Cardoon Celery Celery, Chinese Fuki Rhubarb Udo Zuiki cultivars, varieties, and/or hybrids of these commodities	30 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> • Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
[Subgroup 4-16A] Leafy Greens[*] including: Amaranth, Chinese Amaranth, Leafy Aster, Indian Blackjack Cat's Whiskers Cham-chwi Cham-na-mul Chervil (fresh leaves) Chipilin Chrysanthemum, Garland Cilantro (fresh leaves) Corn Salad Cosmos Dandelion (leaves) Dang-gwi (leaves) Dillweed Dock Dol-nam-mul Ebolo Endive Escarole Fameflower Feather Cockscomb Good King Henry Huauzontle Jute (leaves) Lettuce, Bitter Lettuce, Head Lettuce, Leaf Orach Parsley (fresh leaves) Plantain, Buckhorn Primrose, English Purslane, Garden Purslane, Winter Radicchio Spinach Spinach, Malabar Spinach, New Zealand Spinach, Tanier Swiss Chard Violet, Chinese (leaves) Cultivars, varieties, and/or hybrids of these commodities	14 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> • Do not apply more than 8 fl oz/ (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
[Subgroup 6A] Legume Vegetables, Edible Podded including: Bean (Phaseolus spp.) Runner Snap Wax Bean (Vigna spp.) Asparagus Chinese Longbean Moth Yardlong Jackbean Pea (Pisum spp.) Dwarf Edible-pod Snow Sugar Snap Pigeon Sword Bean	21 days	6-8 fl oz (0.094 to 0.125 lb ai /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 prescribed for the control of small annual grasses. The addition of Ammonium Sulfate (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. (0.125 lb ai) per acre per year. Do not apply more than 1 application per acre per year except as indicated below for small annual grasses. For Reduced Rate Control for Small Annual Grasses: Do not make more than 2 applications at 4 fl oz (0.0625 lb ai) per acre per year. For peas apply before bloom, but no later than 21 days before harvest.
Melon [Subgroup 9A] Citron melon Muskmelon (including cantaloupe) Watermelon	14 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not make more than 4 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.
Mint Peppermint and Spearmint tops	21 days	6-16 fl oz ⁽⁴⁾ (0.094 to 0.25 lb ai /A)	1 qt by ground or 1% v/v (but not less than 1 pt/A by air.)	Restrictions <ul style="list-style-type: none"> Do not apply more than 16 fl oz (0.250 lb ai) per acre per application. Do not make more than 2 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Mustard Seed[*]	75 days	4-6 fl oz (0.0625 to 0.094 lb ai / A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> • Do not apply more than 6 fl oz (0.094 lb ai) per acre per application. • Do not make more than 2 applications per acre per year except as indicated below for Reduced Rate Control for Annual Grasses • Do not apply more than 12 fl oz (0.188 lb ai) per acre per year. • Do not apply after crop has begun bolting. Crop injury may occur when Clethodim 2 EC Herbicide is applied during the bloom period. • For Reduced Rate Control for Small Annual Grasses: Do not make more than 3 applications at 4 fl oz (0.0625 lb ai) per acre per year • For repeat applications make on a minimum of a 14 day interval.
Okra[*]	3 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> • Do not apply more than 8 fl oz/A (0.125 lb ai/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 ai/A) per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
[Bulb Onion] [Subgroup 3-07A] 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, Bulb Cultivars, varieties, and/or hybrids of these.	45 days	6-16 fl oz (0.094 to 0.25 lb ai /A)	1% v/v in the finished spray volume.	Minimum of 20 gal/A spray volume by ground in entire U.S. Minimum of 20 gal/A spray volume by air in California. In states other than California, air applications to onions or garlic must be made in a minimum of 10 gal/A. Restrictions <ul style="list-style-type: none"> Do not apply more than 16 fl oz (0.250 lb ai) per acre per application. Do not make more than 2 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. When applying by air, do not exceed 8 fl oz (0.125 lb ai) per acre per application and 16 fl oz (0.25 lb ai) per acre per year. If Clethodim 2 EC Herbicide 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 Clethodim 2 EC Herbicide to garlic or onion until the crop has at least two full leaves. Use a 14 day spray interval between the application of Clethodim 2 EC Herbicide and liquid nitrogen or other herbicide applications. Injury to crop may occur when shorter intervals are observed. For repeat applications make on a minimum of a 14 day interval. For Garlic <ul style="list-style-type: none"> When applying by ground, do not exceed 8 fl oz (0.125 lb ai) per acre per application or 16 fl oz (0.250 lb ai) per acre per year.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
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, Macrostem Onion, Tree (tops) Onion, Welsh (tops) Shallot (fresh leaves) Cultivars, varieties, and/or hybrids of these commodities.	14 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> • Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For air applications to onion, do not exceed 8 fl oz (0.125 lb ai) per acre per application. • In California for air applications to onion, do not exceed 2 applications per year. • If Clethodim 2 EC Herbicide 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 Clethodim 2 EC Herbicide to onion or garlic until the crop has at least two full leaves. Use a 14 day spray interval between the application of Clethodim 2 EC Herbicide and liquid nitrogen or other herbicide applications. Injury to crop may occur when shorter intervals are observed. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
[Subgroup 6C] Dried Shelled Pea including: Pea (Pisum spp.) Field Pigeon	30 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1 qt by ground or 1% v/v (but not less than 1 pt/A) by air. ⁽³⁾	<p>Apply before bloom but not later than 30 days prior to harvest.</p> <p>Refer to appropriate Table for reduced rate prescribed for the control of small annual grasses.</p> <p>The addition of Ammonium Sulfate (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>Applications of Clethodim 2 EC Herbicide 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 (0.125 lb ai) per acre per application. • Do not make more than 1 application per year, except as indicated below for small annual grasses. • Do not apply more than 8 fl oz (0.125 lb ai) per acre per year. • For Reduced Rate Control for Small Annual Grasses: Do not make more than 2 applications at 4 fl oz (0.0625 lb ai) per acre per year.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
[Subgroup 6B] Pea, Succulent Shelled including: Pea (Pisum spp.) English Pea Garden Pea Green Pea Pigeon Pea	21 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1 qt by ground or 1% v/v (but not less than 1 pt/A) by air. ⁽³⁾	<p>Apply before bloom but not later than 21 days prior to harvest.</p> <p>Refer to appropriate Table for reduced rate prescribed for the control of small annual grasses.</p> <p>The addition of Ammonium Sulfate (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 (0.125 lb ai) per acre per application. • Do not make more than 1 application per year, except as indicated below for small annual grasses. • Do not apply more than 8 fl oz (0.125 lb ai) per acre per year. • For Reduced Rate Control for Small Annual Grasses: Do not make more than 2 applications at 4 fl oz (0.625 lb ai) per acre per year.
Peanut (including Perennial)	40 days	6-16 fl oz (0.094 to 0.25 lb ai /A)	1 qt by ground or 1% v/v (but not less than 1 pt/A) by air. ⁽³⁾	<p>The addition of Ammonium Sulfate (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 (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

[Crop Group11-10] Pome Fruit including Apple Azarole Crabapple Loquat Mayhaw Medlar Pear Pear, Asian Quince Quince, Chinese Quince, Japanese Tejocote	14 days	4-8 fl oz (0.0625 to 0.125 lb ai/A)	Non-ionic surfactant (NIS) at 0.25% v/v	Restrictions <ul style="list-style-type: none"> • Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.
--	---------	--	---	--

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Potato	30 days	6-16 fl oz (0.094 to 0.25 lb ai /A)	1 qt by ground or 1% v/v (but not less than 1 pt/A) by air. ⁽³⁾	The addition of Ammonium Sulfate (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 (0.250 lb ai) per acre per application. Do not make more than 2 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.
Radish Radish Leaves	15 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not make more than 2 applications per acre per year. Do not apply more than 16 fl oz (0.250 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.
[Subgroup 1B] Root Vegetables (except Sugar Beet and Radish), including: Burdock, Edible Celeriac Chervil, Turnip Rooted Chicory Ginseng Horseradish Parsley, Turnip Rooted Parsnip Radish, Oriental Rutabaga Salsify Salsify, Black Salsify, Spanish Skirret Turnip	30 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not make more than 4 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Safflower	70 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not make more than 4 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.
Sesame	14 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not make more than 4 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. Do not apply during flowering. For repeat applications make on a minimum of a 14 day interval.
Soybean	60 days	6-16 fl oz (0.094 to 0.25 lb ai /A)	1 qt by ground or 1% v/v (but not less than 1 pt/A) by air. ⁽³⁾	<p>Refer to appropriate Table for reduced rate prescribed for the control of small annual grasses. The addition of Ammonium Sulfate (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> Restrictions <ul style="list-style-type: none"> Do not apply more than 16 fl oz (0.250 lb ai) per acre per application. Do not make more than 2 applications per acre per year except as indicated below for Reduced Rate Control for Annual Grasses Do not apply more than 32 fl oz (0.500 lb ai) per acre 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 (0.0625 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Squash/Cucumber [Subgroup 9B] 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)	14 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not make more than 4 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.
Stalk and Stem Vegetable [Subgroup 22A][*] Agave Aloe Vera Asparagus Bamboo Shoots 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	1 day	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. Do not make more than 2 applications per acre per year. Do not apply more than 16 fl oz (0.250 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Stevia, dried leaves	14 days	4-8 fl oz (0.0625 to 0.125 lb ai/A)	Non-ionic Surfactant (NIS) at 0.25% v/v	<p>Clethodim 2 EC Herbicide has not been tested on all varieties. It is the responsibility of the user to test Clethodim 2 EC Herbicide on a small portion of the crop to be treated before treating the entire field.</p> <p>Verify crop safety to Clethodim 2 EC Herbicide on a small area of the crop, at the desired Clethodim 2 EC Herbicide 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, Clethodim 2 EC Herbicide 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 (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.
<p>[Crop Group 12-12] Stone Fruit including Apricot Apricot, Japanese Capulin, Cherry, Black 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</p>	14 days	4-8 fl oz (0.0625 to 0.125 lb ai/A)	Non-ionic Surfactant (NIS) at 0.25% v/v	<p>Restrictions</p> <ul style="list-style-type: none"> • Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Strawberry	4 days	6-8 fl oz (0.094 to 0.125 lb ai /A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> • Do not apply more than 8 fl oz (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Sugar Beet	40 days	6-16 fl oz (0.094 to 0.25 lb ai/A)	1 qt by ground or 1% v/v (but not less than 1 pt/A) by air. ⁽³⁾	<p>Refer to appropriate Table for reduced rate prescribed for the control of small annual grasses.</p> <p>The addition of Ammonium Sulfate (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 (0.250 lb ai) per acre per application. • Do not make more than 2 applications per acre per year except as indicated below for Reduced Rate Control for Annual Grasses • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For Reduced Rate Control for Small Annual Grasses: Do not make more than 8 applications at 4 fl oz (0.0625 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
[Subgroup 20B] Sunflower including: Calendula Castor oil Plant Chinese Tallowtree Euphorbia Evening Primrose Jojoba Niger Seed Rose Hip Stokes Aster Tallowwood Tea Oil Plant Vernonia	70 days	6-16 fl oz (0.094 to 0.25 lb ai/A)	1 qt by ground or 1% v/v (but not less than 1 pt/A) by air. ⁽³⁾	<p>The addition of Ammonium Sulfate (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 Clethodim 2 EC Herbicide on a small area of the crop, at the desired Clethodim 2 EC Herbicide 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, Clethodim 2 EC Herbicide 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 (0.250 lb ai) per acre per application. • Do not make more than 2 applications per acre per year except as indicated below for Reduced Rate Control for Annual Grasses • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For Reduced Rate Control for Small Annual Grasses: Do not make more than 8 applications at 4 fl oz (0.0625 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.
Tomato	20 days	6-16 fl oz (0.094 to 0.25 lb ai/A)	1% v/v in the finished spray volume.	<p>Restrictions</p> <ul style="list-style-type: none"> • Do not apply more than 16 fl oz (0.250 lb ai) per acre per application. • Do not make more than 2 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
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 Pequi Pili Nut Pine Nut Pistachio Sapucaia Nut Tropical Almond Walnut, Black Walnut, English Yellowhorn Cultivars, varieties, and/or hybrids of these.	14 days	6-16 fl oz (0.094 to 0.125 lb ai/A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> • Do not apply more than 8 fl oz/A (0.125 lb ai/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 ai/A) per year. • For repeat applications make on a minimum of a 14 day interval.

CROP SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

Crops⁽¹⁾	Minimum Time From Application to Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre⁽²⁾	Special Use Instructions
Tuberous and Corm Vegetables Subgroup [Subgroup 1C] (except Potato) Including Sweet Potato, Yam Artichoke Chinese Jerusalem Cassava Bitter Sweet Ginger	30 days	6-16 fl oz (0.094 to 0.25 lb ai/A)	1% v/v in the finished spray volume.	The addition of Ammonium Sulfate (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 (0.250 lb ai) per acre per application. Do not make more than 2 applications per acre per year. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year. For repeat applications make on a minimum of a 14 day interval.
Turnip Greens	14 days	6-8 fl oz (0.094 to 0.125 lb ai/A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz/A (0.125 lb ai/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 ai/A) per year. For repeat applications make on a minimum of a 14 day interval.
Watercress[*]	30 days	6-8 fl oz (0.094 to 0.125 lb ai/A)	1% v/v in the finished spray volume.	Restrictions <ul style="list-style-type: none"> Do not apply more than 8 fl oz/A (0.125 lb ai/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 ai/A) per year. Do not apply when watercress is under flood conditions. Do not apply Clethodim 2 EC Herbicide when water is in the field and hold water for at least 24 hours after an application. For repeat applications make on a minimum of a 14 day interval.

N/A = Not Applicable

[*Not for use in California.]

- Clethodim 2 EC Herbicide is not to be used on vegetable crops being grown for seed production unless specific use directions are provided.
- 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. Clethodim 2 EC Herbicide may be applied to seedling or established alfalfa grown for seed, hay, silage, green chop or direct grazing.
4. For weed control in established alfalfa and peppermint and spearmint tops, the minimum use rate is 10 fl oz/A (0.156 lb ai).
5. 1 to 2 qt/A of liquid fertilizer (10-34-0, 28%N or 32%N), or an equivalent amount (2.5 to 4.0 lb/A) of spray grade ammonium sulfate (AMS) may be added to Clethodim 2 EC Herbicide applications, in addition to the specified rate of crop oil concentrate.
6. Restriction: Do not apply Clethodim 2 EC Herbicide 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 safety to Clethodim 2 EC Herbicide 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, determine if the herbicide can be used safely on a few plants prior to widespread application. Neither the seller nor the manufacturer of *Clethodim* 2 EC Herbicide have investigated the safety factor to plants not listed on the label.

INSTRUCTIONS 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 Table 1, Crop Specific Use Directions and Restrictions for Clethodim 2 EC Herbicide.
- Do not exceed the maximum number of applications per year listed in Table 1, Crop Specific Use Directions and Restrictions for Clethodim 2 EC Herbicide.
- Do not exceed the maximum yearly rate listed in Table 1, Crop Specific Use Directions and Restrictions for Clethodim 2 EC Herbicide.

INSTRUCTIONS FOR ANNUAL GRASSES

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

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* (inches)	RATE FL OZ/ ACRE	HIGH RATE ⁽¹⁾
Barnyardgrass	Echinochloa crus-galli	2 to 8	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Broadleaf Signalgrass	Brachiaria platyphylla	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Brome				
California	Bromus carinatus	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Cheat	Bromus secalinus	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Downy	Bromus tectorum	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Ripgut	Bromus diandrus	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Canarygrass	Phalaris canariensis	1 to 4	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Crabgrass				
Hairy	Digitaria adscendens	2 to 6**	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Large	Digitaria sanguinalis	2 to 6**	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Smooth	Digitaria ischaemum	2 to 6**	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Southern	Digitaria ciliaris	2 to 6**	6 (0.094 lb ai)	8 (0.125 lb/ ai/A)
Crowfootgrass	Dactyloctenium aegyptium	2 to 6**	6 (0.094 lb ai)	8 (0.125 lb/ ai/A)

Fall Panicum	Panicum dichotomiflorum	2 to 8	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Field Sandbur	Cenchrus incertus	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Foxtail				
Giant	Setaria faberi	2 to 12	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Green	Setaria viridis	2 to 8	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Yellow	Setaria glauca	2 to 8	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Goosegrass	Eleusine indica	2 to 6**	6 (0.094 lb ai)	8 (0.125 lb/ aiA)
Itchgrass	Rottboellia cochinchinensis	2 to 6	6 (0.094 lb ai)	8 (0.125 lb/ aiA)
Junglerice	Echinochloa colona	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Lovegrass (Stinkgrass)	Eragrostis cilianensis	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Rabbitsfootgrass	Polypogon monspeliensis	1 to 4	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Red Rice	Oryza sativa	1 to 3	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Ryegrass				
Hardy	Lolium remotum	2 to 6	6 (0.094 lb ai)	8 (0.125 lb/ aiA)
Italian	Lolium multiflorum	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Seedling Johnsongrass	Sorghum halepense	4 to 10	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Shattercane	Sorghum bicolor	6 to 18	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Southwestern Cupgrass	Eriochloa gracilis	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Sprangle top				
Amazon	Leptochloa panicoides	2 to 6	6 (0.094 lb ai)	8 (0.125 lb/ aiA)
Bearded	Leptochloa fascicularis	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Mexican	Leptochloa uninervia	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Red	Leptochloa filiformis	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Texas Panicum	Panicum texanum	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Volunteer Cereals ⁽²⁾				
Barley	Hordeum vulgare	2 to 6	6 (0.094 lb ai)	8 (0.125 lb/ aiA)
Oats	Avena sativa	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Rye	Secale cereale	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Wheat	Triticum aestivum	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Volunteer Corn ⁽³⁾	Zea mays	4 to 12	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Volunteer Corn ⁽³⁾	Zea mays	12 to 24	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Volunteer Corn ⁽⁴⁾	Zea mays	4 to 12	8 (suppression only) (0.125 lb ai/A)	
Volunteer Grain Sorghum	Sorghum bicolor	8 to 12	6 (0.094 lb ai)	8 (0.125 lb/ aiA)
Wild Oats	Avena fatua	2 to 6	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Wild Proso Millet	Panicum miliaceum	2 to 10	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Witchgrass	Panicum capillare	2 to 8	6 (0.094 lb ai)	8 (0.125 lb ai/A)
Woolly Cupgrass	Eriochloa villosa	2 to 8	6 (0.094 lb ai)	8 (0.125 lb ai/A)

Generally occurs between 3-leaf stage and tillering.

** Length of lateral growth.

⁽¹⁾ Rates higher than 8 fl oz/A (0.125 lb ai/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 0.250 lb ai/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 Clethodim 2 EC Herbicide use rate for control is 8 fl oz/A (0.125 lb ai/A).

⁽³⁾ Includes Roundup Ready®, Liberty Link® and imidazolinone-resistant (Clearfield®) volunteer corn.

⁽⁴⁾ Sethoxydim resistant (Poast Protected®) volunteer corn.

**INSTRUCTIONS FOR ANNUAL & PERENNIAL GRASS CONTROL
IN ESTABLISHED ALFALFA AND PEPPERMINT AND SPEARMINT
TOPS WITH CLETHODIM 2 EC HERBICIDE**

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

Mowing: The best control of annual grasses can be achieved by applying Clethodim 2 EC Herbicide before grass weeds are mowed. Once a grass is mowed it becomes tougher to control, as much of the available leaf surface has been removed. In areas without a killing frost, some annuals can over-winter after having been mowed multiple times. These grasses form large crowns and may contain many viable buds. These grasses, even though they may be an annual grass, may require repeated applications of Clethodim 2 EC Herbicide for partial or complete control.

Irrigated Alfalfa and peppermint and spearmint tops: Irrigation practices can be very critical to the successful use of Clethodim 2 EC Herbicide in established alfalfa and 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 an 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 Clethodim 2 EC Herbicide in a minimum of 10 GPA in established alfalfa and peppermint and spearmint tops when applying by air.

Annual Grass Control: Apply Clethodim 2 EC Herbicide at the grass sizes indicated in the Directions for Annual Grass Table and rates indicated. If a grass has been cut, apply Clethodim 2 EC Herbicide after active growth has resumed and regrowth has reached the minimum height and before it reaches the maximum height indicated. Apply before the alfalfa/ 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 Clethodim 2 EC Herbicide may vary from region to region. Also some annuals germinate over a 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: Clethodim 2 EC Herbicide 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 peppermint and 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.

INSTRUCTIONS FOR ANNUAL BLUEGRASS CONTROL WITH CLETHODIM 2 EC HERBICIDE

GRASS SPECIES	WEED STAGE	RATE FL OZ/ ACRE	HIGH RATE
Annual Bluegrass (Poa annua)	to 4-leaf	6* (.0934 lb ai)	16(0.25 lb ai)

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 ai/A) to control annual bluegrass in seedling and established alfalfa and peppermint and spearmint tops.

**DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES
IN CANOLA, DRIED SHELLLED BEAN & PEA (INCLUDING SOYBEAN),
EDIBLE PODDED LEGUME VEGETABLES, FLAX, MUSTARD SEED,
BEAN & PEA (SUCCULENT SHELLLED) 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⁾
Barnyardgrass	Echinochloa crus-galli	1 to 4	4(0.0625 lb ai)
Broadleaf Signalgrass	Brachiaria platyphylla	1 to 4	5 (0.078 lb ai)
Crabgrass			
Large	Digitaria sanguinalis	1 to 3*	4(0.0625 lb ai)
Large	Digitaria sanguinalis	1 to 4*	5 (0.078 lb ai)
Smooth	Digitaria ischaemum	1 to 3*	4(0.0625 lb ai)
Smooth	Digitaria ischaemum	1 to 4*	5 (0.078 lb ai)
Southern	Digitaria ciliaris	1 to 4*	5 (0.078 lb ai)
Fall Panicum	Panicum dichotomiflorum	1 to 4	4(0.0625 lb ai)
Foxtail			
Giant	Setaria faberi	1 to 4	4(0.0625 lb ai)
Green	Setaria viridis	1 to 4	4(0.0625 lb ai)
Millet	Setaria italica	1 to 4	5 (0.078 lb ai)
Yellow	Setaria glauca	1 to 4	4(0.0625 lb ai)
Seedling Johnsongrass	Sorghum halepense	1 to 6	5 (0.078 lb ai)
Shattercane	Sorghum bicolor	4 to 10	4(0.0625 lb ai)
Texas Panicum	Panicum texanum	1 to 4	5 (0.078 lb ai)
Volunter Cereals			
Barley	Hordeum vulgare	1 to 4	5 (0.078 lb ai)
Oats	Avena sativa	1 to 4	5 (0.078 lb ai)
Wheat	Triticum aestivum	1 to 4	5 (0.078 lb ai)
Volunteer Corn**	Zea mays	4 to 12	4(0.0625 lb ai)
Wild Proso Millet	Panicum miliaceum	1 to 6	4(0.0625 lb ai)
Wild Oats	Avena fatua	1 to 4	5 (0.078 lb ai)

*Length of lateral growth

**Not sethoxydim-resistant (Poast Protected) Corn

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

INSTRUCTIONS 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 application rate listed in Table 1, Crop Specific Use Directions and Restrictions for Clethodim 2 EC Herbicide.
- Do not exceed the maximum number of applications per year listed in Table 1, Crop Specific Use Directions and Restrictions for Clethodim 2 EC Herbicide.
- Do not exceed the maximum yearly rate listed in Table 1, Crop Specific Use Directions and Restrictions for Clethodim 2 EC Herbicide.

INSTRUCTIONS FOR PERENNIAL GRASSES continued

GRASS SPECIES	WEED HEIGHT (inches)	RATE FL OZ/ ACRE	HIGH RATE
Bermudagrass (<i>Cynodon dactylon</i>)			
First Application	3 (or up to 6" runners)	8 (0.125 lb ai)	16 (0.25 lb ai)
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	8 (0.125 lb ai)	16 (0.25 lb ai)
Fescue, Tall (<i>Festuca arundinacea</i>)			
First Application	4 to 8	8 (0.125 lb ai)	16 (0.25 lb ai)
Repeat Application(s) (if regrowth occurs)	4 to 8	8 (0.125 lb ai)	16 (0.25 lb ai)
Foxtail Barley (<i>Hordeum jubatum</i>)			
First Application	2 to 6	8 (0.125 lb ai)	16 (0.25 lb ai)
Repeat Application(s) (if regrowth occurs)	2 to 6	8 (0.125 lb ai)	16 (0.25 lb ai)
Orchardgrass (<i>Dactylis glomerata</i>)			
First Application	4 to 8	8 (0.125 lb ai)	16 (0.25 lb ai)
Repeat Application(s) (if regrowth occurs)	4 to 8	8 (0.125 lb ai)	16 (0.25 lb ai)
Quackgrass* (<i>Elytrigia repens</i>)			
First Application	4 to 12	8 (0.125 lb ai)	16 (0.25 lb ai)
Repeat Application(s) (if regrowth occurs)	4 to 12	8 (0.125 lb ai)	16 (0.25 lb ai)
Rhizome Johnsongrass (<i>Sorghum halepense</i>)			
First Application	12 to 24	8 (0.125 lb ai)	16 (0.25 lb ai)
Repeat Application(s) (if regrowth occurs)	6 to 18	8 (0.125 lb ai)	16 (0.25 lb ai)
Wirestem Muhly (<i>Muhlenbergia frondosa</i>)			
First Application	4 to 8	8 (0.125 lb ai)	16 (0.25 lb ai)
Repeat Application(s) (if regrowth occurs)	4 to 8	8 (0.125 lb ai)	16 (0.25 lb ai)
Perennial Bluegrass*			
Roughstalk (<i>Poa trivialis</i>)			
Kentucky (<i>Poa prantensis</i>)			
First Application	2 to 4	8 (0.125 lb ai)	16 (0.25 lb ai)
Repeat Application(s) (if regrowth occurs)	2 to 4	8 (0.125 lb ai)	16 (0.25 lb ai)
Bentgrass* (<i>Agrostis</i> spp.)			
First Application	2 to 4	-	16 (0.25 lb ai)
Repeat Application(s) (if regrowth occurs)	2 to 4	-	16 (0.25 lb ai)

*Control of quackgrass, perennial bluegrass and bentgrass with Clethodim 2 EC Herbicide may be enhanced by adding Ammonium Sulfate (AMS) at 2.5 to 4.0 lb/A

TANK MIXES INFORMATION

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

TANK MIXING RESTRICTIONS

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 of any tank mix component.
10. Do not tank mix Clethodim 2 EC Herbicide when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.

TANK MIX APPLICATION OF CLETHODIM 2 EC HERBICIDE 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 labeled rate 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 Clethodim 2 EC Herbicide, as specified in the respective size and rate tables.

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 Clethodim 2 EC Herbicide. Agitation must create a rippling or rolling action on the water surface.
3. If tank mixing Clethodim 2 EC Herbicide 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. **Continue agitation 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. Verify mixing and compatibility qualities by a jar test.

INFORMATION ON ANTAGONISM

Tank mixes of Clethodim 2 EC Herbicide with postemergence broadleaf herbicides have shown some reduction or failure to control certain grass species which would have otherwise been controlled when CLETHODIM 2 EC is applied alone. Activity of the postemergence broadleaf herbicide in the tank mix is not affected.

ALFALFA

Table 1. CLETHODIM 2 EC HERBICIDE TANK MIXES WITH BROADLEAF HERBICIDES FOR ALFALFA
(Refer to the instruction 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
Clethodim 2 EC Herbicide + 2,4-DB ⁽⁴⁾	10 to 16 fl oz (0.156 to 0.25 lb ai) + Refer to 2,4-DB label for use rate.	10 to 16 fl oz (0.156 to 0.25 lb ai) + Refer to 2,4-DB label for use rate.	1%	1%
Clethodim 2 EC Herbicide + imazethapyr ⁽⁵⁾	10 to 16 fl oz (0.156 to 0.25 lb ai) + Refer to imazethapyr labels for use rate.	-	1%	1%
Clethodim 2 EC Herbicide + bromoxynil ⁽⁶⁾	10 to 16 fl oz (0.156 to 0.25 lb ai) + 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 Clethodim 2 EC Herbicide alone (without a tank mix herbicide), according to the appropriate size and rate requirements.

⁽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⁾ Clethodim 2 EC Herbicide plus 2,4-DB may increase the severity of crop injury when tank mixed. Alfalfa plants will generally outgrow this temporary crop injury within a few weeks.

⁽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. Restriction: 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 Clethodim 2 EC Herbicide 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. Clethodim 2 EC Herbicide 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 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. Clethodim 2 EC Herbicide 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 Clethodim 2 EC Herbicide plus bromoxynil application. Warm, humid conditions may enhance leaf burn. New crop growth will not be affected.

⁽⁷⁾ **Restriction:** Do not apply when alfalfa is under moisture, temperature, insect or disease stress or has been stressed by other pesticide carryover or application.

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

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

PRODUCT	APPLICATION RATES/ACRE		AMMONIUM SULFATE	
	ANNUAL GRASSES ⁽¹⁾	PERENNIAL GRASSES	GROUND	AIR
Clethodim 2 EC Herbicide ⁽²⁾ + glufosinate ⁽³⁾	4 to 5 fl oz 0.0625 to 0.078 lb ai) + Refer to Liberty label for use rate.	-	3.0 lb	3.0 lb

⁽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⁾**Restriction:** Do not apply Clethodim 2 EC Herbicide tank mix during or after bolting or flowering or crop injury may occur.

⁽³⁾For use only on Liberty Link canola

COTTON

Table 3. CLETHODIM 2 EC HERBICIDE 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	
Clethodim 2 EC Herbicide ⁽⁴⁾ + lactofen + MSMA (4.0 lb/gal) or MSMA (6.6 lb/gal)	6 to 8 fl oz (0.094 to 0.125 lb ai)	8 to 16 fl oz (0.125 to 0.25 lb ai)	1%	Reduce broadcast rate in proportion to the band area actually treated.
	See lactofen label for rate to control broadleaf weeds and height limitations for cotton. Refer to the Clethodim 2 EC Herbicide label for weed height and species controlled.			
	See MSMA label for rate to control broadleaf weeds and height limitations for cotton. Refer to the Clethodim 2 EC Herbicide 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 Clethodim 2 EC Herbicide alone (without a tank mix herbicide), according to the appropriate size and rate requirements.

⁽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 Clethodim 2 EC Herbicide may be necessary.

COTTON (continued)

Table 4. CLETHODIM 2 EC HERBICIDE TANK MIXED WITH BROMOXYNIL TO CONTROL EMERGED WEEDS IN BXN COTTON AS A BROADCAST APPLICATION

PRODUCT ⁽¹⁾	APPLICATION RATE/ACRE ⁽²⁾	CROP OIL CONCENTRATE PER ACRE ⁽³⁾	COMMENTS ⁽⁷⁾
	ANNUAL GRASSES		
Clethodim 2 EC Herbicide + bromoxynil ^(4,5,6)	8 to 16 fl oz (0.125 to 0.25 lb ai) Refer to bromoxynil label for use rate 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 Clethodim 2 EC Herbicide at the prescribed 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 BXN cotton or other cotton where bromoxynil can be applied in postemergence over-the-top applications.

⁽⁵⁾**Restriction:** Do not apply the Clethodim 2 EC Herbicide plus bromoxynil tank mix within 75 days of harvest.

⁽⁶⁾**Restriction:** 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. CLETHODIM 2 EC HERBICIDE TANK MIXED WITH GLYPHOSATE TO CONTROL EMERGED GRASSES IN COTTON AS A BROADCAST APPLICATION

PRODUCT	APPLICATION RATE/ACRE ⁽¹⁾		ADJUVANT		COMMENTS
	ANNUAL GRASSES	PERENNIAL GRASSES	Glyphosate formulation with built in adjuvant	Glyphosate formulation without built in adjuvant	
Clethodim 2 EC Herbicide + Glyphosate	6 to 8 fl oz (0.094 to 0.125 lb ai)	8 to 16 fl oz (0.125 to 0.25 lb ai)	Non-ionic surfactant @ 0.125 to 0.25% v/v plus ammonium sulfate @ 8.5 to 17 lb per 100 gals of carrier	Crop oil concentrate @ 1 pt/A plus ammonium sulfate @ 8.5 to 17 lb per 100 gals of carrier.	See charts for grasses controlled.
	Refer to glyphosate label for use rate 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 Clethodim 2 EC Herbicide at the prescribed rate with the appropriate amount of crop oil concentrate.

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

Table 6. CLETHODIM 2 EC HERBICIDE TANK MIXES WITH BROADLEAF HERBICIDES FOR BEANS (DRY AND SUCCULENT SHELLED)

(Refer to the instruction 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
Clethodim 2 EC Herbicide + bentazon	8 to 10 fl oz (0.125 to 0.156 lb ai) + Refer to bentazon label for use rate.	10 to 16 fl oz (0.156 to 0.25 lb ai) + Refer to bentazon label for use rate.	1%	1%

⁽¹⁾If grass regrowth occurs or an additional flush of new grass emerges, make a second application of Clethodim 2 EC Herbicide alone (without a tank mix herbicide), according to the appropriate size and rate requirements.

⁽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.

FLAX

Table 7. REDUCED RATE CLETHODIM 2 EC HERBICIDE TANK MIXES WITH BROADLEAF HERBICIDES FOR FLAX

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

PRODUCT	APPLICATION RATES/ACRE		CROP OIL CONCENTRATE	
	ANNUAL GRASSES ⁽¹⁾	PERENNIAL GRASSES	GROUND	AIR
Clethodim 2 EC Herbicide + bromoxynil + MCPA ^(2, 3)	4 to 5 fl oz (0.0625 to 0.078 lb ai) + Refer to bromoxynil + MCPA Advanced label for use rate.	-	1 pt	1 pt
Clethodim 2 EC Herbicide + bromoxynil + MCPA ^(2, 3)	4 to 5 fl oz (0.0625 to 0.078 lb ai) + Refer to bromoxynil + MCPA ^(2, 3) label for use rate.	-	1 pt.	1 pt.
Clethodim 2 EC Herbicide + bromoxynil ^(2, 3)	4 to 5 fl oz (0.0625 to 0.078 lb ai) + Refer to bromoxynil label for use rate.	-	1 pt	1 pt
Clethodim 2 EC Herbicide + MCPA Ester ⁽²⁾⁽³⁾	4 to 5 fl oz (0.0625 to 0.078 lb ai) + Refer to MCPA Ester label for use rate.	-	1 pt	1 pt

⁽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⁾**Restriction:** Do not apply Clethodim 2 EC Herbicide tank mix during or after the bud stage or to ornamental flax or crop injury may occur.

⁽³⁾**Restriction:** Do not apply tank mixes if temperatures are expected to exceed 85° F at (or 3 days following) application or crop injury may occur.

SOYBEAN

Table 8. CLETHODIM 2 EC HERBICIDE 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 LB AMS
Clethodim 2 EC Herbicide + 2,4-D ester ⁽³⁾	3 fl oz (0.047 lb ai)	Foxtail 1 to 3 Fall Panicum 1 to 3	1 qt	1 to 2 qt or 2.5 to 4.0 lb AMS
	4 fl oz (0.0625 lb ai)	Foxtail 1 to 4 Fall Panicum 1 to 4	1 qt	1 to 2 qt or 2.5 to 4.0 lb AMS
	6 to 8 fl oz (0.094 to 0.125 lb ai) + Refer to 2,4-D ester label for use rate.	(See Grass Chart for grasses claimed.)	1 qt	1 to 2 qt or 2.5 to 4.0 lb AMS

*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 Clethodim 2 EC Herbicide according to the appropriate size and rate requirements.

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

⁽³⁾Products containing the following active ingredients can be tank mixed with Clethodim 2 EC Herbicide plus 2,4-D ester: flumioxazin, sulfentrazone, chlorimuron / sulfentrazone, S-metolachlor, pendimethalin, metribuzin, metribuzin plus S-metolachlor and glyphosate.

Table 9. CLETHODIM 2 EC TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN
(Refer to the instruction 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
Clethodim 2 EC Herbicide + Cobra Herbicide (lactofen) (EPA Reg. No. 59639-34)	6 to 8 fl oz (0.094 to 0.125 lb ai) + 12.5 fl oz (0.195 lb lactofen/A)	8 to 16 fl oz (0.125 lb ai/A to 0.25 lb ai/A) + 12.5 fl oz (0.195 lb lactofen/A)	0.5 to 1%	1%
Clethodim 2 EC Herbicide + bentazon	8 to 10 fl oz (0.125 to 0.156 lb ai/A) + Refer to bentazon label for use rate.	10 to 16 fl oz (0.156 to 0.25 lb ai) + Refer to bentazon label for use rate.	1%	1%
Clethodim 2 EC Herbicide + Glyphosate (For use on Roundup Ready soybean only)	6 to 8 fl oz (0.094 to 0.125 lb ai) + Refer to glyphosate label for use rate.	8 to 16 fl oz (0.125 to 0.25 lb ai/A) + Refer to glyphosate label for use rate.	0.5 to 1% ⁽⁴⁾	1% ⁽⁴⁾
Clethodim 2 EC Herbicide + acifluorfen	6 to 8 fl oz (0.094 to 0.125 lb ai) + Refer to acifluorfen label for use rate.	6 to 8 fl oz (0.094 to 0.125 lb ai) + Refer to acifluorfen label for use rate.	0.5 to 1%	1%

Table 9. CLETHODIM 2 EC HERBICIDE TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN

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

PRODUCT ⁽²⁾	APPLICATION RATES/ACRE ⁽¹⁾		CROP OIL CONCENTRATE ⁽³⁾ (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
Clethodim 2 EC Herbicide + fomesafen ⁽⁶⁾	6 to 8 fl oz (0.094 to 0.125 lb ai) + Refer to the fomesafen label for use rate.	8 to 16 fl oz (0.125 to 0.25 lb ai/A) + Refer to the fomesafen label for use rate.	1%	1%
Clethodim 2 EC Herbicide + chlorimuron ethyl	8 to 10 fl oz (0.125 to 0.156 lb ai/A) + Refer to chlorimuron ethyl label for use rate.	10 to 16 fl oz (0.156 to 0.25 lb ai) + Refer to chlorimuron ethyl label for use rate.	1%	1%
Clethodim 2 EC Herbicide ⁽⁴⁾ + imazethapyr	6 to 8 fl oz (0.094 to 0.125 lb ai) + Refer to imazethapyr label for use rate.	8 to 16 fl oz (0.125 to 0.25 lb ai/A) + Refer to imazethapyr label for use rate.	1%	1%
Clethodim 2 EC Herbicide ⁽⁵⁾ + Cobra Herbicide (lactofen) (EPA Reg. No. 59639-34) + chlorimuron ethyl	8 to 10 fl oz (0.125 to 0.156 lb ai/A) + 6 to 8 fl oz (0.094 to 0.125 lb ai) + Refer to chlorimuron ethyl label for use rate.	-	0.5%	1%
Clethodim 2 EC Herbicide ⁽⁵⁾ + Cobra Herbicide (lactofen) (EPA Reg. No. 59639-34) + bentazon	8 to 10 fl oz (0.125 to 0.156 lb ai/A) + 6 to 10 fl oz (0.094 to 0.156 lb ai/A) + Refer to bentazon label for use rate	-	0.5%	1%
Clethodim 2 EC Herbicide ⁽⁵⁾ + Cobra Herbicide (lactofen) (EPA Reg. No. 59639-34) + imazethapyr	8 to 10 fl oz (0.125 to 0.156 lb ai/A) + 6 to 10 fl oz (0.094 to 0.156 lb ai/A) + 6 to 10 fl oz (0.094 to 0.156 lb ai/A)	-	0.5%	1%

Table 9. CLETHODIM 2 EC HERBICIDE TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN
(Refer to the instruction tables above for specific grasses and growth stages.) (continued)

PRODUCT ⁽²⁾	APPLICATION RATES/ACRE ⁽¹⁾		CROP OIL CONCENTRATE ⁽³⁾ (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
Clethodim 2 EC Herbicide ⁽⁵⁾ + flumiclorac (EPA Reg. No. 59639-82) + Pursuit 70 DG (imazethapyr)	8 to 10 fl oz (0.125 to 0.156 lb ai/A) + 4 fl oz (0.0625 lb ai/A) + Refer to imazethapyr for use rate.	-	1%	1%
Clethodim 2 EC Herbicide ⁽⁵⁾ + Resource Herbicide (flumiclorac) (EPA Reg. No. 59639-82) + bentazon	8 to 10 fl oz (0.125 to 0.156 lb ai/A) + 4 fl oz (0.0625 lb ai/A) + Refer to bentazon label for use rate.	-	1%	1%
Clethodim 2 EC Herbicide ⁽⁵⁾ + Resource Herbicide (flumiclorac) (EPA Reg. No. 59639-82) + chlorimuron ethyl	8 to 10 fl oz (0.125 to 0.156 lb ai/A) + 4 fl oz (0.0625 lb ai/A) + Refer to chlorimuron ethyl label for use rate.	-	1%	1%
Clethodim 2 EC Herbicide ⁽⁵⁾ + Cobra Herbicide (lactofen) (EPA Reg. No. 59639-34) + Resource Herbicide (flumiclorac) (EPA Reg. No. 59639-82)	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + 6 fl oz (0.094 lb ai/A) + 4 fl oz (0.0625 lb ai/A)	-	0.5%	1%
Clethodim 2 EC Herbicide ⁽⁵⁾ + cloransulam	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + Refer to cloransulam label for use rate.	8 to 16 fl oz (0.125 to 0.25 lb ai/A) + Refer to cloransulam label for use rate.	1%	-

Table 9. CLETHODIM 2 EC HERBICIDE TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN

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

PRODUCT ⁽²⁾	APPLICATION RATES/ACRE ⁽¹⁾		CROP OIL CONCENTRATE ⁽³⁾ (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
Clethodim 2 EC Herbicide ⁽⁵⁾ + Cobra Herbicide (lactofen) (EPA Reg. No. 59639-34) + cloransulam	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + 6 to 8 fl oz (0.094 to 0.156 lb ai/A) + Refer to cloransulam label for use rate.	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + 6 to 8 fl oz (0.094 to 0.156 lb ai/A) + Refer to cloransulam label for use rate.	1%	-
Clethodim 2 EC Herbicide ⁽⁵⁾ + imazamox	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + Refer to imazamox label for use rate.	-	1%	-
Clethodim 2 EC Herbicide ⁽⁵⁾ + Cobra Herbicide (lactofen) (EPA Reg. No. 59639-34) + imazamox	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + 6 to 8 fl oz (0.094 to 0.156 lb ai/A) + Refer to imazamox label for use rate.	-	1%	-
Clethodim 2 EC Herbicide ⁽⁵⁾ + (chlorimuron + thifensulfuron)	6 to 8 fl oz ⁽⁷⁾ (0.094 to 0.156 lb ai/A) + Refer to chlorimuron + thifensulfuron label for use rate.		1 qt	-
Clethodim 2 EC Herbicide ⁽⁵⁾ + Cobra Herbicide (lactofen) (EPA Reg. No. 59639-34) + (chlorimuron + thifensulfuron)	6 to 8 fl oz ⁽⁷⁾ (0.094 to 0.156 lb ai/A) + 4 to 8 fl oz (0.0625 to 0.156 lb ai/A) + Refer to chlorimuron + thifensulfuron label for	-	1 pt	-

**Table 9. *CLETHODIM* 2 EC HERBICIDE TANK MIXES WITH BROADLEAF HERBICIDES
FOR SOYBEAN**

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

	use rate			
Clethodim 2 EC Herbicide ⁽⁵⁾ + Resource Herbicide (flumiclorac) (EPA Reg. No. 59639-82)	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + 4 to 12 fl oz (0.0625 to 0.125 lb ai/A)	-	1 qt	-

Table 9. CLETHODIM 2 EC HERBICIDE TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN

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

PRODUCT ⁽²⁾	APPLICATION RATES/ACRE ⁽¹⁾		CROP OIL CONCENTRATE ⁽³⁾ (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
Clethodim 2 EC Herbicide + cloransulam + fomesafen	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + Refer to cloransulam and fomesafen labels for use rates	8 to 16 fl oz (0.125 to 0.25 lb ai/A) + Refer to cloransulam and fomesafen labels for specific application rates.	1%	-

⁽¹⁾If grass regrowth occurs or an additional flush of new grass emerges, make a second application of Clethodim 2 EC Herbicide alone (without a tank mix herbicide), according to the appropriate size and rate requirements.

⁽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 lb of ammonium sulfate is required when Clethodim 2 EC Herbicide 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 system, 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 qt/A of liquid fertilizer (10-34-0, 28%N, or 32%N) is advised when Clethodim 2 EC Herbicide is tank mixed with imazethapyr, flumiclorac, bentazon/acifluorfen, chloransulam-methyl, thifensulfuron/chlorimuron, imazamox, propyzamide, lactofen plus chlorimuron, lactofen plus bentazon, lactofen plus imazethapyr, lactofen plus chloransulam-methyl, lactofen plus thifensulfuron/chlorimuron, and lactofen plus imazamox. An equivalent amount (2.5 to 4.0 lb/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 fomesafen label for geographic and rotational restrictions.

⁽⁷⁾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.

SOYBEAN (continued)

Table 10. REDUCED RATE CLETHODIM 2 EC HERBICIDE TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN (Refer to table Directions for reduced rate to control small annual grasses in canola, dried shelled bean & pea (including soybean, edible podded legume vegetables, flax, mustard seed, bean & pea (succulent) and sugar beet)(Reduced rate directions not for use in California)

PRODUCT	APPLICATION RATES/ACRE ⁽¹⁾		CROP OIL CONCENTRATE ^(3,4) (V/V)	
	ANNUAL GRASSES ⁽²⁾	PERENNIAL GRASSES		
			GROUND	AIR
Clethodim 2 EC Herbicide + cloransulam	4 to 8 fl oz (0.0625 to 0.156 lb ai/A) + Refer to cloransulam label for use rate.	-	1%	1%
Clethodim 2 EC Herbicide + (imazethapyr)	4 to 6 fl oz (0.094 to 0.156 lb ai/A) + Refer to imazethapyr for use rate.	-	1%	1%

⁽¹⁾If grass regrowth occurs or an additional flush of new grass emerges, make a second application of Clethodim 2 EC Herbicide alone (without a tank mix herbicide), according to the appropriate size and rate requirements.

⁽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 qt/A of liquid fertilizer (10-34-0, 28%N, or 32%N) is required when Clethodim 2 EC Herbicide is tank mixed at reduce rates. An equivalent amount (2.5 to 4.0 lb/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.

PEANUT (INCLUDING PERENNIAL)

Table 11. CLETHODIM 2 EC HERBICIDE TANK MIXES WITH BROADLEAF HERBICIDES FOR PEANUT (INCLUDING PERENNIAL)

(Refer to the instruction 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	GROUND	AIR
Clethodim 2EC Herbicide + bentazon	8 to 10 fl oz (0.125 to 0.156 lb ai/A) + Refer to bentazon label for use rate.	-	1%	1%
Clethodim 2 EC Herbicide + acifluorfen	8 to 10 fl oz (0.125 to 0.156 lb ai/A) + Refer to acifluorfen label for use rate.	-	1%	1%

⁽¹⁾If grass regrowth occurs or an additional flush of new grass emerges, make a second application of Clethodim 2 EC Herbicide alone (without a tank mix herbicide), according to the appropriate size and rate requirements.

⁽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.

INSTRUCTIONS FOR GRASS SUPPRESSION FOR HARVEST EFFICIENCY IN PEANUT (INCLUDING PERENNIAL) WITH CLETHODIM 2 EC HERBICIDE			
GRASS SPECIES	WEED STAGE	RATE FL OZ/ ACRE	HIGH RATE
Annual and perennial grasses that exceed height claimed for control on height charts "INSTRUCTIONS FOR ANNUAL GRASSES" & "INSTRUCTIONS FOR PERENNIAL GRASSES"	Up to and including grasses in the seed head stage.	16 (0.25 lb ai/A)	32 (0.5 lb ai/A)
Restriction: Do not apply as part of a tank mix when applying Clethodim 2 EC Herbicide for grass suppression. Add a crop oil concentrate at 1 qt/A by ground to the finished spray volume.			

SUGAR BEET

Table 12. CLETHODIM 2 EC HERBICIDE TANK MIXED WITH CLOPYRALID APPLIED TO SUGAR BEET
(Refer to the instructions 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
Clethodim 2 EC Herbicide + clopyralid	6 to 8 fl oz (0.094 to 0.156 lb ai/A)	8 to 16 fl oz (0.125 to 0.25 lb ai/A)	1%	1%
	Refer to clopyralid label for use rate.			

⁽¹⁾If grass regrowth occurs or an additional flush of new grass emerges, make a second application of Clethodim 2 EC Herbicide alone (without a tank mix herbicide), according to the appropriate size and rate requirements.

⁽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.

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 13. TANK MIX APPLICATION OF CLETHODIM 2 EC HERBICIDE 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	
Clethodim 2 EC Herbicide + (tetraconazole)	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + Refer to tetraconazole label for use rate.	8 to 16 fl oz (0.125 to 0.25 lb ai/A) + Refer to tetraconazole label for use rate.	1%

⁽¹⁾If grass regrowth occurs, or an additional flush of new grass emerges, make a second application of Clethodim 2 EC Herbicide alone (without a tank mix fungicide) according to the appropriate size and rate requirements.

⁽²⁾Refer to Clethodim 2 EC Herbicide 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 14. TANK MIX APPLICATION OF *CLETHODIM 2 EC* HERBICIDE AND INSECTICIDES FOR CONTROL OF GRASS WEEDS AND INSECTS IN ALFALA, COTTON, 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	peppermint and spearmint tops ^(4,5)	Peanut	Soybean	Sunflower
Clethodim 2 EC Herbicide + acephate	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + Refer to acephate label for use rate.	8 to 16 fl oz (0.125 to 0.25 lb ai/A) + Refer to acephate label for use rate.	1%		X	X	X		
Clethodim 2 EC Herbicide + acephate ⁽⁶⁾	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + Refer to acephate label for use rate.	8 to 16 fl oz (0.125 to 0.25 lb ai/A) + Refer to acephate label for use rate.	1%		X	X	X	X	
Clethodim 2 EC Herbicide + esfenvalerate	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + Refer to esfenvalerate label for use rate.	8 to 16 fl oz (0.125 to 0.25 lb ai/A) + Refer to esfenvalerate label for use rate.	1%						X
Clethodim 2 EC Herbicide + lambda-cyhalothrin	6 to 8 fl oz (0.094 to 0.156 lb ai/A) + Refer to lambda-cyhalothrin label for use rate.	8 to 16 fl oz (0.125 to 0.25 lb ai/A) + Refer to lambda-cyhalothrin label for use rate.	1%						X
Clethodim 2 EC Herbicide + lambda-cyhalothrin	10 to 16 fl oz ⁽⁷⁾ (0.156 to 0.25 lb ai) + Refer to lambda-cyhalothrin label for use rate.	10 to 16 fl oz (0.156 to 0.25 lb ai) + Refer to lambda-cyhalothrin label for use rate.	1%	X					
Clethodim 2 EC Herbicide + β-cyfluthrin	10 to 16 fl oz ⁽⁷⁾ (0.156 to 0.25 lb ai) + Refer to β-cyfluthrin label for use rate.	10 to 16 fl oz (0.156 to 0.25 lb ai) + Refer to β-cyfluthrin label for use rate.	1%	X					

Clethodim 2 EC Herbicide + dimethoate	+ Refer to dimethoate label for use rate.	10 to 16 fl oz (0.156 to 0.25 lb ai) + Refer to dimethoate label for use rate.	1%	X					
--	---	--	----	---	--	--	--	--	--

PRODUCT ⁽²⁾	APPLICATION RATES/ACRE ⁽¹⁾		CROP OIL CONCENTRATE (V/V) ⁽³⁾	CROP					
	ANNUAL GRASSES	PERENNIAL GRASSES		Alfalfa ⁽⁴⁾	Cotton	peppermint and spearmint tops ^(4,5)	Peanut	Soybean	Sunflower
Clethodim 2 EC Herbicide + permethrin	10 to 16 fl oz (0.156 to 0.25 lb ai) or 6 to 8 fl oz/A ⁽⁷⁾ oz (0.094 to 0.156 lb ai/A) in seedling alfalfa + Refer to permethrin label for use rate.	10 to 16 fl oz (0.156 to 0.25 lb ai) + Refer to permethrin label for use rate.	1%	X					

⁽¹⁾If grass regrowth occurs, or an additional flush of new grass emerges, make a second application of Clethodim 2 EC Herbicide alone (without a tank mix insecticide) according to the appropriate size and rate requirements.

⁽²⁾Refer to Clethodim 2 EC Herbicide and insecticide label for rates and weeds and insects 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 peppermint and spearmint tops foliage. Refer to the insecticide label for further information. It is suggested that prior to using any of these insecticide/herbicide tank mixtures, that a small area of the field be treated first and observations for crop injury be made prior to treating the whole field.

⁽⁵⁾The Clethodim 2 EC Herbicide rate needs to be 6 to 8 fl oz (0.094 to 0.156 lb ai) /A for annual grass control in baby peppermint and spearmint tops, minimum of 8 fl oz (0.156 lb ai) /A for annual grass control in established peppermint and spearmint tops and 8 to 16 fl oz (0.156 - 0.312 lb ai) /A for perennial grass control. Add crop oil concentrate at the rate of 1.0 to 2.0 pt/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 Clethodim 2 EC Herbicide rate needs to be 6 to 8 fl oz/A for annual grass control in seedling alfalfa.

Table 15. INSTRUCTIONS FOR ROUNDUP READY VOLUNTEER CORN CONTROL IN ROUNDUP READY SOYBEAN WITH CLETHODIM 2 EC HERBICIDE TANK MIX

Roundup Ready Volunteer Corn Height (inches)	Clethodim 2 EC Herbicide Rate fl oz/A	Glyphosate⁽¹⁾ rate for formulations without built in adjuvant	Adjuvant
<12	4 (0.0625 lb ai/A)	Refer to glyphosate label for use rate.	Crop oil concentrate @ 1 pt/A plus ammonium sulfate @ 8.5 to 17 lb per 100 gals of carrier
12 to 18	5 (0.078 lb ai/A)		
18 to 24	6 (0.094 lb ai/A)		

⁽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 *Clethodim* 2 EC Herbicide, as specified in the respective size and rate tables.
- Avoid contact with foliage, green stems, or fruit crops, or any desirable plants and trees, other than soybean with the Roundup Ready gene as severe injury or destruction will result.
- This tank mix may be applied postemergence to Roundup Ready soybean up through the full flowering stage.

Restrictions

- Do not tank mix *Clethodim* 2 EC Herbicide 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 *Clethodim* 2 EC Herbicide 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.

**CONIFER TREES
SPECIFIC RESTRICTIONS AND DIRECTIONS FOR CLETHODIM 2 EC
HERBICIDE**

CROPS		Use Rates Per Acre	Special Use Instructions
Common Name	Scientific Name		
Arborvitae, American	Thuja occidentalis	6-16 fl oz (0.094 to 0.25 lb ai/A)	<p>Clethodim 2 EC Herbicide can be used to control labeled grasses in Christmas tree farms, conifer nurseries and conifer plantations (but not in forests).</p> <p>Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gals (0.25% v/v).</p> <p>For repeat application make on a minimum of a 14 day interval.</p> <p>Restrictions</p> <ul style="list-style-type: none"> Do not apply more than 16 fl oz (0.250 lb ai) per acre per application. Do not make more than 2 applications per acre per year at the 16 fl oz (0.312 lb ai) rate. Do not make more than 5 applications per acre per year at the 6 fl oz (0.094 lb ai) rate. Do not apply more than 32 fl oz (0.500 lb ai) per acre per year.
Cedars	Cedrus spp.		
Cypress	Taxodium spp.		
Fir, Douglas	Pseudotsuga menziesii		
Firs	Abies spp.		
Hemlock, Canadian/Eastern	Tsuga canadensis		
Hemlock, Western	Tsuga heterophylla		
Pines	Pinus spp.		
Spruces	Picea spp.		
Yew	Taxus spp.		

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.

INSTRUCTIONS FOR GRASS SUPPRESSION IN NON-CROP AREAS WITH CLETHODIM 2 EC HERBICIDE			
GRASS SPECIES	WEED STAGE	RATE FL OZ/ ACRE	HIGH RATE
Annual and perennial grasses that exceed height claimed for control on height chart above.	Up to and including grasses in the seed head stage.	12 (0.1875 lb ai/A)	16 (0.25 lb ai/A)
Restriction: Do not apply as part of a tank mix when applying Clethodim 2 EC Herbicide for grass suppression. Add a crop oil concentrate at 1 qt/A by ground to the finished spray volume.			

DIRECTIONS FOR USE

FALLOW LAND

Clethodim 2 EC Herbicide 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 Clethodim 2 EC Herbicide at 6 to 8 fl oz (0.094 - 0.156 lb ai) /A for annual grasses and 8 to 16 fl oz (0.156 -0.312 lb ai) /A for perennial grasses. When both grass and broadleaf weeds are the target pest, Clethodim 2 EC Herbicide may be tank mixed with 2,4-D ester or dicamba for broad spectrum control. When both annual and perennial grasses occur in the same field, use a minimum of 8 fl oz/A. Clethodim 2 EC Herbicide rate.

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 in the Instructions for Annual and Perennial Grasses section of this label.
- Annual grasses that emerge after the Clethodim 2 EC Herbicide 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 (0.125 lb ai) Clethodim 2 EC Herbicide per application to Annual Grasses and 16 fl oz (0.250 lb ai) Clethodim 2 EC Herbicide per application to Perennial Grasses.
- Do not exceed 5 applications at the 6 fl oz use rate for Annual Grasses and do not exceed 4 applications at the 8 fl oz (0.125 lb ai) rate for Perennial Grasses.
- For repeat applications make on a minimum of a 14 day interval.
- Do not apply more than 32 fl oz (0.500 lb ai) Clethodim 2 EC Herbicide per acre 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 Clethodim 2 EC Herbicide application.

TABLE 15. CLETHODIM 2 EC HERBICIDE IN TANK MIXES TO CONTROL ANNUAL AND PERENNIAL GRASSES IN FALLOW LAND

PRODUCT	APPLICATION RATES/ACRE ⁽¹⁾		CROP OIL CONCENTRATE ⁽²⁾ (V/V)	
	Annual Grasses	Perennial Grasses	Ground	Air
Clethodim 2 EC Herbicide + 2,4-D ester or (dicamba)	6 to 8 fl oz (0.094 to 0.125 lb ai/A) + Refer to 2,4-D ester or dicamba label for use rate	8 to 16 fl oz (0.125 to 0.25 lb ai/A)	1%	1%

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

⁽²⁾Always use a 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 16. CLETHODIM 2 EC HERBICIDE 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	
Clethodim 2 EC Herbicide	10 to 12 fl oz/A (0.156 to 0.187 lb ai/A)	Tall Fescue	Festuca arundinacea	4 to 6 inches tall (40 to 60% green-up)
Adjuvant: Clethodim 2 EC Herbicide must be applied with crop oil concentrate at 1 qt/A, plus a spray grade ammonium sulfate at 2.5 to 4 lb/A. Mixing Order: Thoroughly mix spray grade ammonium sulfate (AMS) in water, add Clethodim 2 EC Herbicide, then add crop oil concentrate.				

SPECIAL APPLICATION INSTRUCTIONS

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.

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.

Apply only to fields that have warm-season grasses established for 2 years. Applications of Clethodim 2 EC Herbicide to emerged warm-season grasses may cause injury.

NOTE: Clethodim 2 EC Herbicide applications are most effective if applied when average nighttime temperatures are consistently greater than or equal to 47°F.

Restrictions

- Do not mow area for 2 weeks after the Clethodim 2 EC Herbicide application.
- Do not use flood jet nozzles.
- 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.

TABLE 17. CLETHODIM 2 EC HERBICIDE FOR THE SUPPRESSION OF TALL FESCUE SEED-HEADS IN NON-PRODUCING AGRICULTURAL AREAS

Product	Product Rate	Suppression	Application Timing
Clethodim 2 EC Herbicide	1 1/2 to 2 fl oz/A (0.023 to 0.031 lb ai/A)	Tall Fescue Seed-Heads (Festuca arundinacea)	(50 to 90% Tall Fescue green-up)

ADJUVANT: Clethodim 2 EC Herbicide must be applied with crop oil concentrate at 1 qt/A, plus a spray grade ammonium sulfate at 2.5 to 4 lb/A. **Mixing Order:** Thoroughly mix spray grade ammonium sulfate in water, add Clethodim 2 EC Herbicide, then add crop oil concentrate.

SPECIAL APPLICATION INSTRUCTIONS

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

Use the higher *Clethodim* 2 EC Herbicide rate if less tall fescue green matter is present.

Apply in a minimum of 15 to 20 gals of water per acre at a spray pressure of 40 to 60 psi at the nozzle. Apply using flat fan or hollow cone nozzles. Do not use flood nozzles.

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

Restrictions

Do not mow area for two weeks after the *Clethodim* 2 EC Herbicide application. 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.

**NON-BEARING FRUIT AND NUT CROPS
SPECIFIC RESTRICTIONS AND DIRECTIONS FOR CLETHODIM 2 EC
HERBICIDE**

CROPS		Use Rates Per Acre	Special Use Instructions
Common Name	Scientific Name		
Apple	Malus spp.	6-8 fl oz (0.094 to 0.125 lb ai/A)	<p>Non-bearing fruit and nut crops are plants which will not bear fruit or nuts for at least one year following Clethodim 2 EC Herbicide application.</p> <p>Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gals (0.25% v/v).</p> <p>Use of crop oil concentrate is not advised since it may injure flowers and foliage.</p> <p>Sugar maples cannot be tapped for syrup within one year of Clethodim 2 EC Herbicide application.</p> <p>For repeat application make on a minimum of a 14 day interval.</p> <p>Crop injury to non-bearing fruit and nut crops can occur if Clethodim 2 EC Herbicide is improperly applied. Clethodim 2 EC Herbicide must not be applied directly over the top of these plant types. Instead, direct spray at the base of the plant where grassy weeds are growing near the ground.</p> <p>Restrictions</p> <ul style="list-style-type: none"> • If Clethodim 2 EC Herbicide 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. • Clethodim 2 EC Herbicide 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 (0.125 lb ai) per acre per application. • Do not make more than 4 applications per acre per year. • Do not apply more than 32 fl oz (0.500 lb ai) per acre per year.
Berry	Vaccinium spp.		
	Rubus spp.		
Cherry, Sweet	Prunus avium		
Citrus Fruits	Citrus spp.		
Grapes	Vitis spp.		
Olives	Olea spp.		
Peach	Prunus persica		
Pears	Pyrus communis		
Prunes	Prunus spp.		
Stone Fruits	Prunus spp.		
Strawberries	Fragaria spp.		
Tree Nuts			
Almond	Prunus triloba		
Filbert	Corylus maxima		
Pecan	Carya illinoensis		
Pistachio	Pistacia vera		
Walnut	Juglans spp.		

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.

INSTRUCTIONS FOR GRASS SUPPRESSION IN NON-CROP AREAS WITH CLETHODIM 2 EC HERBICIDE			
GRASS SPECIES	WEED STAGE	RATE FL OZ/ ACRE	HIGH RATE
Annual and perennial grasses that exceed height claimed for control on height chart above.	Up to and including grasses in the seed head stage.	12 (0.187 lb ai/A)	16 (0.25 lb ai/A)
Restriction: Do not apply as part of a tank mix when applying Clethodim 2 EC Herbicide for grass suppression. Add a crop oil concentrate at 1 qt/A by ground to the finished spray volume.			

DIRECTIONS FOR USE IN ORNAMENTALS

ORNAMENTALS SPECIFIC DIRECTIONS AND RESTRICTIONS FOR CLETHODIM 2 EC HERBICIDE	
Use Rates Per Acre	Special Use Instructions
6-16 fl oz (0.094 to 0.25 lb ai/A)	<p>For ornamental plant uses, Clethodim 2 EC Herbicide can be used to control labeled grass weeds in greenhouses, lathhouses, shadehouses, and around outdoor ornamentals, including nurseries, parks, roadside plantings, and structure landscapes. The plants listed below have been tested for use with Clethodim 2 EC Herbicide applications. See tables with listed ornamentals (ornamental trees, ground covers, garden flowers and plants, and shrubs).</p> <p>Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gals (0.25% v/v).</p> <p>Use of crop oil concentrate is not advised since it may injure flowers and foliage.</p> <p>For repeat application make on a minimum of a 14 day interval.</p> <p>Restrictions</p> <ul style="list-style-type: none">• Clethodim 2 EC Herbicide must not be applied to non-bearing fruit or nut crops which are grown for root stock.• Do not apply more than 16 fl oz (0.250 lb ai) per acre per application.• Do not make more than 2 applications per acre per year.• For repeat applications make on a minimum of a 14 day interval.• Do not apply more than 32 fl oz (0.500 lb ai) per acre per year.

IMPORTANT

Clethodim 2 EC Herbicide successfully controls weeds in newly transplanted and established non-grassy ornamentals. Plant safety to *Clethodim 2 EC* Herbicide 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 *Clethodim 2 EC* Herbicide have investigated the safety factor to ornamental plants not listed on the label.

The following plants have been tested for use with for Clethodim 2 EC Herbicide 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 japonicus</i>
Periwinkle, Lesser	<i>Vinca minor</i>

GARDEN FLOWERS AND PLANTS	
COMMON NAME	SCIENTIFIC NAME
Ageratum	Ageratum spp.
Alyssum*, Sweet	Lobularia maritima
Asparagus Fern	Asparagus setaceus
Bleeding Heart	Dicentra spectabilis
Cast Iron Plant	Aspidistra elatior
Chrysanthemum	Chrysanthemum spp.
Cinquefoil	Potentilla spp.
Coleus	Coleus spp.
Coralbells	Heuchera sanguinea
Cranesbill	Geranium spp.
Dahlia	Dahlia spp.
Daisy, Trailing African	Osteospermum fruticosum
Daylily	Hemerocallis spp.
Dusty Miller	Senecio cineraria
Euonymus	Euonymus spp.
Gazania	Gazania spp.
Geranium, House	Pelargonium hortorum
Heather, False	Cuphea hyssopifolia
Hosta	Hosta fortunei
Iris	Iris spp.
Jasmine Tobacco	Nicotiana glauca
Loosestrife	Lythrum salicaria
Marigold	Tagetes spp.
Partridgeberry	Mitchella repens
Petunia*	Petunia hybrida
Phlox	Phlox spp.
Pinks	Dianthus spp.
Portulaca	Portulaca grandiflora
Salvia	Salvia spp.
Saxifrage	Saxifraga spp.
Sedum	Sedum spp.
Selloum	Philodendron selloum
Snapdragon*	Antirrhinum majus
Sweet Flag	Acorus gramineus
Tickseed	Coreopsis grandiflora
Touch-Me-Not	Impatiens spp.
Verbena	Verbena spp.
Violet	Viola spp.
Yarrow, Common	Achillea millefolium
Zinnia	Zinnia elegans

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

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

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

INSTRUCTIONS FOR ANNUAL GRASSES IN ORNAMENTALS

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

GRASS SPECIES	SCIENTIFIC NAME	WEED* HEIGHT INCHES	RATE FL OZ/ACRE ⁽¹⁾	HIGH RATE ⁽²⁾
Barnyardgrass	Echinochloa crus-galli	2 to 8	8	16
Broadleaf Signalgrass	Brachiaria platyphylla	2 to 6	8	16
Brome				
California	Bromus carinatus	2 to 6	8	16
Cheat	Bromus secalinus	2 to 6	8	16
Downy	Bromus tectorum	2 to 6	8	16
Ripgut	Bromus diandrus	2 to 6	8	16
Canarygrass	Phalaris canariensis	1 to 4	8	16
Crabgrass				
Hairy	Digitaria adscendens	2 to 6**	8	16
Large	Digitaria sanguinalis	2 to 6**	8	16
Smooth	Digitaria ischaemum	2 to 6**	8	16
Southern	Digitaria ciliaris	2 to 6**	8	16
Crowfootgrass	Dactyloctenium aegyptium	2 to 6**	8	16
Fall Panicum	Panicum dichotomiflorum	2 to 8	8	16
Field Sandbur	Cenchrus incertus	2 to 6	8	16
Foxtail				
Giant	Setaria faberi	2 to 12	8	16
Green	Setaria viridis	2 to 8	8	16
Yellow	Setaria glauca	2 to 8	8	16
Goosegrass	Eleusine indica	2 to 6**	8	16
Itchgrass	Rottboellia cochlin	2 to 6	8	16
Junglerice	Echinochloa colona	2 to 6	8	16
Lovegrass (Stinkgrass)	Eragrostis cilianensis	2 to 6	8	16
Rabbitsfootgrass	Polypogon monspeliensis	1 to 4	8	16
Red Rice	Oryza sativa	1 to 3	8	16
Rygrass				
Hardy	Lolium remotum	2 to 6	8	16
Italian	Lolium multiflorum	2 to 6	8	16
Seedling Johnsongrass	Sorghum halepense	4 to 10	8	16
Shattercane	Sorghum bicolor	6 to 18	8	16
Southwestern Cupgrass	Eriochloa gracilis	2 to 6	8	16
Sprangletop				
Amazon	Leptochloa panicoides	2 to 6	8	16
Bearded	Leptochloa fascicularis	2 to 6	8	16
Mexican	Leptochloa uninervia	2 to 6	8	16
Red	Leptochloa filiformis	2 to 6	8	16
Texas Panicum	Panicum texanum	2 to 6	8	16
Volunteer Cereals				
Barley	Hordeum vulgare	2 to 6	8	16
Oats	Avena sativa	2 to 6	8	16
Rye	Secale cereale	2 to 6	8	16
Wheat	Triticum aestivum	2 to 6	8	16
Volunteer Corn	Zea mays	4 to 12	6 ⁽³⁾	8 ⁽¹⁾
Volunteer Corn	Zea mays	12 to 24	8	16
Volunteer Grain Sorghum	Sorghum bicolor	8 to 12	8	16
Wild Oats	Avena fatua	2 to 6	8	16
Wild Proso Millet	Panicum miliaceum	2 to 10	8	16
Witchgrass	Panicum capillare	2 to 8	8	16
Woolly Cupgrass	Eriochloa villosa	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 ai/A) = approximately 0.2 fl oz/1000 sq ft

⁽²⁾ 16 fl oz/A (0.250 lb ai/A) = approximately 0.4 fl oz/1000 sq ft

⁽³⁾ 6 fl oz/A is approximately 0.094 lb ai/A or 0.15 fl oz per 1000 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).

**INSTRUCTIONS FOR ANNUAL BLUEGRASS CONTROL WITH
CLETHODIM 2 EC HERBICIDE IN ORNAMENTALS**

GRASS SPECIES	WEED STAGE	RATE FL OZ/ ACRE	HIGH RATE
Annual Bluegrass (Poa annua)	to 4-leaf	6 (0.094 lb ai/A)	16 (0.25 lb ai/A)

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 (0.250 lb ai) per acre per application.
- Do not make more than 2 applications per acre per year.
- For repeat applications make on a minimum of a 14 day interval.
- Do not apply more than 32 fl oz (0.500 lb ai) per acre per year.

**INSTRUCTIONS FOR PERENNIAL GRASSES WITH
CLETHODIM 2 EC HERBICIDE IN ORNAMENTALS**

Apply only to actively growing grasses at specified weed heights.

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

Restrictions

- Do not apply more than 16 fl oz (0.250 lb ai) per acre per application.
- Do not make more than 2 applications per acre per year.
- For repeat applications make on a minimum of a 14 day interval.
- Do not apply more than 32 fl oz (0.500 lb ai) per acre 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 ai/A) = approximately 0.2 fl oz/1000 sq ft

⁽²⁾ 16 fl oz/A (0.250 lb ai/A) = approximately 0.4 fl oz/1000 sq ft

⁽³⁾ 6 fl oz/A is approximately 0.094 lb ai/A or 0.15 fl oz per 1000 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.

Emergency Response: For help with any spill, leak, fire or exposure involving this material, call CHEMTREC day or night 800-424-9300.

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

[For 2.5 Gallon container]

[Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, 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.]

[For 15 gallon container]

[Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Clean container promptly after emptying. 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. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.]

**DISCLAIMER, RISKS OF USING THIS PRODUCT,
LIMITED WARRANTY
AND LIMITATION OF LIABILITY**

The label instructions for use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of **Agromarketing Co. Inc.**. To the extent permitted under applicable law, all risks shall be assumed by the user.

Agromarketing Co. Inc. warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for use therein described when used in accordance with the Directions for Use set forth in the Complete Directions for Use booklet (Directions), subject to the risks referred to above.

To the extent permitted under applicable law, any damage arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages, such as loss of profits or values or any other special or indirect damages.

Agromarketing Co. Inc. makes no other express or implied warranty including any other express or implied warranty of FITNESS or MERCHANTABILITY.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

The sale of this product does not include a license under any patent owned by **Agromarketing Co. Inc.**

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.

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.