


89547-2

3/28/2014

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|  | U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460 | EPA Reg. Number: 89547-2 | Date of Issuance: MAR 28 2014 |
| | NOTICE OF PESTICIDE: <input checked="" type="checkbox"/> Registration <input type="checkbox"/> Reregistration (under FIFRA, as amended) | Term of Issuance: conditional Name of Pesticide Product: Clethodim 2 EC Herbicide | |
| Name and Address of Registrant (include ZIP Code): 1878673 Ontario Inc 133 Mavety St., Toronto, ON, Canada M6P 2L8 c/o D. O'Shaughnessy Consulting, Inc. 427 Hide Away Circle Cub Run, Kentucky 42729 | | | |
| Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA registration number. | | | |
| <p>On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.</p> <p>This product is registered in accordance with FIFRA section 3(c)(7)(A) provided that you:</p> <ol style="list-style-type: none">1. Submit and/or cite all data required for registration review/reregistration of your product when the Agency requires all registrants of similar products to submit data. You must comply with the clethodim DCI ID# GDCI-121011-937 issued on March 2, 2010. If you have questions or concerns regarding registration review, please contact the Chemical Review Manager, Ricardo Jones at (703) 347-0493 or email at jones.ricardo@epa.gov.2. Make the following label revision(s):<ol style="list-style-type: none">a. Revise "EPA Reg. No.89547-x" to "EPA Reg. No. 89547-2."b. Assure that the EPA establishment number and net contents are also added to the final printed label.3. Within one year of the date on this registration notice, the Storage Stability (830.6317) and Corrosion Characteristics (830.6320) studies must be submitted. They must be conducted in the commercial containers of this product and observations should be made at 0, 3, 6, 9, and 12 month intervals. Alternatively, an accelerated study may be conducted; however, please note that an accelerated study may not be appropriate for this product and the Agency may still require a 1-year study.4. Per 40 CFR 156.10(6), submit one copy of your final printed labeling before you release the product for shipment. <p>If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec.6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. The basic and alternate #1 formulations (both dated 09/19/2013) are acceptable and will be added to your file. If you have any questions regarding this notice, please contact Beth Benbow of my staff at benbow.bethany@epa.gov.</p> | | | |
| Signature of Approving Official: Kathryn V. Montague Project Manager 23 Herbicide Branch Registration Division (7505P) | | Date: MAR 28 2014 | |

| | | |
|-------|---|-----------|
| GROUP | 1 | HERBICIDE |
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CLETHODIM™ 2 EC HERBICIDE

| | |
|---|--------|
| Active Ingredient (w/w) | |
| *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

ACCEPTED
MAR 28 2014
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 89547-2.

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:
1878673 ONTARIO, INC.
133 Mavety St.,
Toronto, ON Canada, M6P 2L8
416-628-5147

EPA Reg. No. 89547 - x

EPA Est. No. 84154-CHN-1

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 | |
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| If in eyes: | <ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 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 to 20 minutes. • Call a poison control center or doctor for treatment advice. |
| If swallowed: | <ul style="list-style-type: none"> • Immediately call a poison control center or doctor. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person. |
| If inhaled: | <ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice. |
| HOT LINE NUMBER Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300 | |
| NOTE TO PHYSICIAN Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid, which can cause pneumonitis. If ingested, probable mucosal damage may contraindicate the use of gastric lavage. | |

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selection chart.

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

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS:

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply where weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwater or rinsate.

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

Solano Grass: Solano County, California: the vernal lakes 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.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

WEED RESISTANCE

Clethodim, the active ingredient in this product, is a Group 1 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population may contain plants naturally resistant to Group 1 herbicides. Such resistant weed plants may not be effectively managed using Group 1 herbicides but may be effectively managed utilizing another herbicide alone or in mixtures from a different Group and/or by using cultural or mechanical practices. However, a herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Consult your local company representative, state cooperative extension service, professional consultants or other qualified authorities to determine appropriate actions for treating specific resistant weeds.

Best Management Practices

Proactively implement diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistance. Scouting after a herbicide application is important because it can facilitate the early identification of weed shifts and/or weed resistance and thus provide direction on future weed management practices. One of the best ways to contain resistant populations is to implement measures to avoid allowing

weeds to reproduce by seed or to proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in retarding the spread of resistant weed seed.

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.

TANK MIXES

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 to the extent consistent with applicable law.

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

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

CHEMIGATION

[Do not apply this product through any irrigation system unless the supplemental labeling on chemigation is followed. Refer to supplemental labeling entitled, "CHEMIGATION - ONION (Dry Bulb and Green) AND GARLIC SPRINKLER IRRIGATION APPLICATION", for use directions for chemigation.]

PRODUCT INFORMATION

FOR USE ON:

Alfalfa, Asparagus, Bean (dry) and Pea (shelled)¹, Bean and Pea (succulent shelled)², Broccoli, Cabbage, Canola*, Carrot, Cauliflower (and other Head and Stem Brassica Vegetables)³, Celery, Clover (grown in Idaho, Oregon and Washington only), Conifers, Cotton, Cranberry, Cucumber, Eggplant (and other Fruiting Vegetables)⁴, Fallow Land and other non-producing agricultural areas, Flax*, Garden Beet, Garlic, Herbs⁵, Hops, Horseradish (and other Root Vegetables)⁶, Legume Vegetables (edible podded)⁷, Lettuce, Head and Leaf (and other leafy greens)⁸, Melons (including Cantaloupes and Watermelons)⁹, Mint, Mustard Greens (and other leafy brassica greens)¹⁰, Mustard Seed*, Non-Bearing Food Crops, Non-Crop or Non-Planted Areas, Onions (dry bulb and green), Ornamentals, Peanut (including perennial), Peppers (bell and non-bell), Potato, Radish, Rhubarb (and other Leaf Petioles)¹¹, Safflower, Sesame, Shallots (dry bulbs and green), Squash (including Pumpkins)⁹, Soybeans, Strawberry, Sugar Beet, Sunflower, Sweet Potato, Tomato and Yam (and other Tuberous and Corm Vegetables)¹²

*** Not for use in California**

NOTES:

1. Other Bean (dry) and Pea (shelled) crops approved for use with CLETHODIM 2 EC include: Bean (*Lupinus spp.*), grain, sweet, white and white sweet; Bean (*Phaseolus spp.*), field, kidney, lima (dry), navy, pinto and tepary; Bean (*Vigna spp.*), adzuki bean, black-eyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, broad (dry), chickpea (garbanzo), guar, lablab bean and lentil; Pea (*Pisum spp.*), field and pigeon
2. Other Bean and Pea (succulent shelled) crops approved for use with CLETHODIM 2 EC include: Bean (*Lupinus spp.*), grain, sweet, white and white sweet; Bean (*Phaseolus spp.*), field, kidney, lima (dry), navy, pinto and tepary; Bean (*Vigna spp.*), adzuki bean, black-eyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, broad (dry), chickpea (garbanzo), guar, lablab bean and lentil; Pea (*Pisum spp.*), field and pigeon
3. Other Head and Stem Brassica Vegetables approved for use with CLETHODIM 2 EC include: Chinese broccoli, Brussels sprouts, Chinese (napa) cabbage, Chinese mustard, cavalo broccolo and kohlrabi
4. Other Fruiting Vegetables (except tomato) approved for use with CLETHODIM 2 EC include: eggplant, groundcherry, pepino, peppers (all) and tomatillo
5. Other Herb crops approved for use with CLETHODIM 2 EC include: angelica, balm, basil, borage, burnet, camomile, catnip, chervil (dried), chive, Chinese chive, clary, coriander (leaf), costmary, culantro (leaf), curry (leaf), dill (dillweed), horehound, hyssop, lavender, lovage (leaf), marigold, marjoram (*Origanum spp.*), nasturtium, parsley (dried), pennyroyal, rosemary, rue, sage and savory, summer and winter

6. Other Root Vegetables approved for use with CLETHODIM 2 EC include: burdock, edible; celeriac; chervil, turnip-rooted; chicory; ginseng; parsley, turnip-rooted; parsnip; radish, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret and turnip
7. Other Edible Podded Legume Vegetable crops approved for use with CLETHODIM 2 EC include: Bean (*Phaseolus spp.*), runner, snap and wax; Bean (*Vigna spp.*), asparagus, Chinese longbean, moth, yardlong, jackbean; Pea (*Pisum spp.*), dwarf, edible-pod, snow, sugar snap, pigeon and sword bean
8. Other Leafy Greens crops approved for use with CLETHODIM 2 EC include: amaranth (Chinese spinach, leafy amaranth and tampala), arugula (roquette), chervil, chrysanthemum (edible-leaved and garland), corn salad, cress (garden, yellow rock and winter), dandelion, dock (sorrel), endive (escarole), lettuce (head and leaf), orach, parsley, purslane (garden and winter), radicchio (red chicory), spinach (New Zealand and Vine (Indian and Malabar))
9. Other cucurbit crops approved for use with CLETHODIM 2 EC include: Chayote (fruit), Chinese Wax Gourd, Citron Melon, Edible Gourd, Gherkin and Muskmelons (all including Honeydew Melon)
10. Other leafy brassica greens approved for use with CLETHODIM 2 EC include: broccoli raab, Chinese (bok choy) cabbage, collards, kale, mizuna, mustard greens, mustard spinach, rape greens, and turnip greens
11. Other Leaf Petiole crops approved for use with CLETHODIM 2 EC include: cardoon, celtuce, Chinese celery, Florence fennel, and Swiss chard
12. Other Tuber and Corm Vegetables approved for use with CLETHODIM 2 EC include: arracacha, arrowroot, Chinese artichoke, Jerusalem artichoke, edible burdock, edible canna, bitter and sweet cassava, chayote (root), chufa, dasheen (taro), ginger, leren, tanier, turmeric, and bean yam

CLETHODIM 2 EC is not intended for use on vegetable crops being grown for seed production unless specific use directions are provided.

CLETHODIM 2 EC is a selective postemergence herbicide for control of annual and perennial grasses. CLETHODIM 2 EC does not control sedges or broadleaf weeds.

Repeated use of CLETHODIM 2 EC (or similar postemergence grass herbicides with the same mode of action) may lead to the selection of naturally occurring biotypes that are resistant to these products in some grass species.

If poor performance occurs and cannot be attributed to adverse weather or application conditions, a resistant biotype may be present. This is most likely to occur in fields where other control strategies such as crop rotation, mechanical removal, and other classes of herbicides are not used from year to year.

Do not allow CLETHODIM 2 EC to come in contact with desirable grass crops such as 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.

Control Symptoms

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

APPLICATION INFORMATION

Timing of Applications

Apply CLETHODIM 2 EC postemergence to actively growing grasses according to rate table use directions. Applications made to grass plants stressed by insufficient moisture, or hot or cold temperatures, or to grass plants exceeding labelled growth stages may result in unsatisfactory control. Do not apply under these conditions.

In arid regions where irrigation is used to supplement limited rainfall, CLETHODIM 2 EC should be applied as soon as possible, after irrigation (within 7 days). In arid regions, a second application of CLETHODIM 2 EC 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 may reduce weed control. DO NOT APPLY CLETHODIM 2 EC if rainfall is expected within one hour, since control may be reduced.

ADDITION OF ADJUVANT OR CROP OIL CONCENTRATE

| CROP | ADJUVANT |
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| Alfalfa, Cotton, Bean (dry) & Pea (shelled), Edible Podded Legume Vegetables, Peanuts (including perennial), Potato, Soybean, Bean & Pea (succulent shelled), Sugar Beet and Sunflower | Always use a crop oil concentrate* at 1.0 qt./A by ground or 1% v/v (but not less than 1 pt./A) in the finished spray volume by air. 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N or 32%N), or an equivalent amount (2.5 to 4.0 lbs./A) of spray-grade ammonium sulfate (AMS) may be added to CLETHODIM 2 EC applications, in addition to the labelled 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. |
| Asparagus, Canola, Carrot, Clover, Cranberry, Cucurbits, Flax, Fruiting Vegetables (except Tomato), Garden Beet, Garlic, Head & Stem Brassica Vegetables, Herbs, Hops, Leaf Petioles, Leafy Brassica Greens, Leafy Greens, Mint, Mustard Seed, Onion (Dry Bulb & Green), Root Vegetables, Safflower, Sesame, Shallots (Dry Bulb & Green), Strawberry, Sweet Potato (Yam & other Tuberous and Corm Vegetables except Potato) and Tomato | Always use a crop oil concentrate at 1% v/v in the finished spray volume unless tank mix instructions indicate otherwise. Do not use liquid fertilizer with clethodim for these crops. |
| Non-Bearing Food Crops, | Add a non-ionic surfactant containing at least 80% |

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| Ornamental Plants | active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v). Do not use crop oil concentrate since it may injure flowers and foliage. |
| Conifer Trees, Fallow Land (and other non-producing agricultural areas), and Non-Crop or Non-planted Areas | Always use a crop oil concentrate containing at least 15% emulsifier at 1% v/v (but not less than 1 pt./A) in the finished spray volume. |
| * Acceptable crop oil concentrates would be those that contain a minimum of 80% oils and 15% emulsifier. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all the following criteria: be non phytotoxic, contain only EPA-exempt ingredients, provide good mixing quality, and be successful in local experience. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. | |

Ground Application

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

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

Air Application

Use a minimum of 3 gals. of spray solution per acre unless otherwise directed in this label. Increase spray volumes up to 10 gals. as grass or crop foliage becomes dense. For onions (dry bulbs and green), garlic, or shallots (dry bulbs and green): When applying by air do not exceed 8 fl. oz./A in a single application. In California, air applications to onions, garlic or shallots should be made in a minimum of 20 gals. of spray solution per acre. In states other than California, air application to onions, garlic, or shallots should be made in a minimum of 10 gals. of spray solution per acre.

NOTE: Crop injury may occur when CLETHODIM 2 EC is applied to onions, garlic or shallots with aerial equipment.

Spot Treatment

When using hand sprayers or high volume sprayers utilizing hand guns, mix 1/4% to 1/2% (0.33 oz. to 0.65 oz. per gal.) CLETHODIM 2 EC 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 is applied as a spot treatment, care should be taken to not exceed the maximum rate allowed on a "per acre" basis or crop injury may occur.

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

Do not apply CLETHODIM 2 EC by chemigation in the states of Idaho, Montana, Oregon and Washington.

Apply CLETHODIM 2 EC 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 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 labelled 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 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.

Do not apply CLETHODIM 2 EC through an irrigation system connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Use Precautions

1. Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, travelers, big gun, solid set, or hand move. Do not apply this product through any other type of irrigation system.
2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from non-uniform distribution of treated water.
3. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
4. 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.
5. A person knowledgeable of the chemigation system and responsible for its operation or under supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

6. 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.
7. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
8. 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.
9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
10. 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.
11. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
12. Do not apply when wind speed favors drift beyond the area intended for treatment.

RESTRICTIONS AND LIMITATIONS

FOR ALL USES

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 or reduced grass control may result.

Do not use CLETHODIM 2 EC on vegetable crops being grown for seed production unless specific use directions are provided.

For canola, do not apply more than 6 fl. oz. of CLETHODIM 2 EC per acre per season. For clover, flax, mustard seed and radish crops, do not apply more than 16 fl. oz. of CLETHODIM 2 EC (0.25 lb. ai) per acre per season. For all other crops, do not apply more than 32 fl. oz. of CLETHODIM 2 EC (0.50 lb. ai) per acre per season. Application on Long Island, New York, is restricted to no more than 16 fl. oz. of CLETHODIM 2 EC (0.25 lb. ai) per acre per season.

Do not apply more than 8 fl. oz./A of CLETHODIM 2 EC **per application** to the following crops: asparagus, brassica vegetables (head and stem), bean (succulent shelled), carrot, cranberry, cucurbits, flax, fruiting vegetables (except tomato), garden beet, green

onion, herbs, hops, leaf petioles, leafy brassica greens, leafy greens, legume vegetables (edible podded), non-bearing food crops, pea (shelled), pea (succulent shelled), root vegetables, safflower, sesame and strawberry. Do not apply more than 6 fl. oz./A of CLETHODIM 2 EC per application to canola or mustard seed. For all other crops, do not apply more than 16 fl. oz. of CLETHODIM 2 EC (0.25 lb. ai) per acre per application.

Exceeding these label rates may result in unacceptable crop injury or the crops thereof rendered unfit for sale, use or consumption..

Do not apply under conditions of stress. Applying CLETHODIM 2 EC 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 effectively, and will be less susceptible to herbicide activity.

Optimal perennial grass control can be obtained if rhizomes or stolons are cut up by preplant tillage practices, (discing, plowing, etc.) to stimulate maximum emergence of grass shoots. Cultural practices, such as continuous no-tillage in which the perennial grass rhizomes or stolons are not cut up, result in a very staggered, non-uniform weed emergence. Due to this non-uniform weed emergence, do not use fewer than 2 CLETHODIM 2 EC applications per year at the appropriate weed-growth stage rate under continuous no-till conditions ; however, do not exceed the maximum yearly application rates listed on this label..

Grass crops such as corn, rice, sorghum, small grains, or turf, etc. are highly sensitive to CLETHODIM 2 EC. While all the vegetable crops on this label have been tested and are tolerant to CLETHODIM 2 EC, not all specialty varieties of these crops have been tested. It is advised that, before applying CLETHODIM 2 EC to specialty varieties of vegetable crops on this label, crop tolerance be investigated first using a small section of the field. It is possible that injury symptoms can occur. Symptoms may appear as leaf speckling or stunting.

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

Tank mixes of CLETHODIM 2 EC and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs, an additional application of CLETHODIM 2 EC may be necessary. **AVOID SPRAY DRIFT.**

Do not allow spray from ground or aerial equipment to drift onto adjacent land or crops. When drift may be a problem, do everything possible to reduce spray drift, including:

- Do not spray if wind speed is 10 mph or greater. If sensitive crops or plants are downwind, extreme caution must be used under all conditions.
- Do not spray if winds are gusty.
- Use extreme caution when conditions are favorable for drift (high temperatures, drought, low relative humidity), especially when sensitive plants are located nearby.

- Do not apply when a temperature inversion exists. If inversion conditions are suspected, consult with local weather services before making an application.
- Further reductions in drift can be obtained by:
 1. Using large droplet size sprays. Do not use nozzles that produce small droplets. Orient nozzles downward and slightly backward as needed to reduce drift for ground applications.
 2. Orienting nozzles straight back with the windstream, using straight stream orifices for aerial applications. Use the lowest number of nozzles practical with the largest possible orifice size to obtain the minimum 3 GPA volume. Application height and boom length should be set according to manufacturer's instructions to minimize drift.
 3. Increasing the volume of spray mixture (for example, a minimum of 10 GPA for ground applications) by using higher flow rate nozzles. Using lower pressure with the appropriate nozzle to obtain higher volumes will also reduce drift.
 4. Applying as close to target plants as practical while maintaining a good spray pattern for adequate coverage.

Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.

CROP SPECIFIC LIMITATIONS AND RESTRICTIONS FOR CLETHODIM 2 EC

| Crop¹ | Minimum Time from Application to Harvest (PHI) | Use Rates per Acre | Crop Oil Concentrate per Acre² | Specific Use Instructions |
|---|--|------------------------------|---|--|
| Alfalfa including: Sainfoin Holy Clover Birdsfoot Trefoil ³ | 15 days before grazing, feeding, or harvesting (cutting) for forage or hay | 6 to 16 fl. oz. ⁴ | 1 qt. by ground or 1% v/v, but not less than 1 pt./A by air. ⁵ | Refer to tank mix partner labels for feeding, grazing, and harvesting instructions ^{5,6} The addition of AMS has shown improved grass control for difficult-to-control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn. |
| Asparagus | 1 day | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. |

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| | | | | For repeat applications make on a minimum of a 14 day interval. |
| Bean, Dry including: Bean (<i>Lupinus spp.</i>) Grain Sweet White White Sweet Bean (<i>Phaseolus spp.</i>) Field Kidney Lima (dry) Navy Pinto Tepary Bean (<i>Vigna spp.</i>) 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 to 16 fl. oz. | 1 qt. by ground or 1% v/v, but not less than 1 pt./A by air. ⁵ | Do not apply more than 16 fl. oz./A per application. For repeat applications make on a minimum of a 14 day interval. Refer to appropriate Table for reduced rate use instructions 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. |
| Bean, Succulent Shelled including: Bean (<i>Phaseolus spp.</i>) Broad Bean (succulent) Lima Bean (green) Bean (<i>Vigna spp.</i>) Black-eyed Pea Cowpea Southern Pea | 21 days | 6 to 8 fl. oz. | 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 use directions for the control of small annual grasses. Do not apply more than one (1) application per acre per season. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome |

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| | | | | Johnsongrass, red rice, wild oats, volunteer cereals and volunteer com. |
| Beet, Garden | 30 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval. |
| Brassica Vegetables, Head & Stem including: Broccoli Brussels sprouts Cabbage, Cauliflower | 30 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of 14 days interval. |
| Canola | 70 days | 4 to 6 fl. oz. | 1% v/v in the finished spray volume. | Do not apply after crop has begun bolting. Crop injury may occur when CLETHODIM 2 EC is applied during the bloom period. Do not apply more than 6 oz./A in a single application. Do not exceed 6 fl. oz./A in a season. |
| Carrot | 30 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. For repeat applications, make on a minimum 14 day interval. |
| Clover | 15 days before grazing, feeding, or harvesting (cutting) for forage or hay | 6 to 16 fl. oz. | 1% v/v in the finished spray volume. | For use on clover grown in the states of Idaho, Oregon and Washington only. Do not exceed 16 fl oz in a season. |
| Cotton | 60 days | 6 to 16 fl. oz. | 1 qt. by ground or 1% v/v, but not less than 1 pt./A by air. ⁵ | Do not graze treated fields or feed treated forage or hay to livestock. |

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| | | | | 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. |
| Cranberry | 30 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. Do not apply between the "hook" stage and full fruit set. For repeat applications make on a minimum of a 14 day interval. |
| Cucurbits including: Chayote (fruit) Chinese Wax Gourd Citron Melon Cucumber Gherkin Gourd, Edible Muskmelons (all) including: Cantaloupes Honeydew Melon Pumpkin Squash (all) Watermelon | 14 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval. |
| Fallow Land Conifer Trees (and other non-producing agricultural areas) Non-Crop or Non-Planted Areas | N/A | 6 to 16 fl. oz. | 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. | Do not plant any crop for 30 days after application unless clethodim is registered for use in that crop. |
| Flax | 60 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Apply prior to bloom. Crop injury may occur when CLETHODIM 2 |

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| | | | | <p>EC is applied during the bloom period.</p> <p>Do not apply more than 8 fl. oz./A in a single application.</p> <p>Do not exceed 16 fl. oz./A in a season.</p> |
| <p>Fruiting Vegetable (except Tomato) including:</p> <p>Eggplant</p> <p>Groundcherry</p> <p>Pepino</p> <p>Peppers (all)</p> <p>Tomatillo</p> | 20 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | <p>Do not apply more than 8 fl. oz./A in a single application.</p> <p>For repeat applications make on a minimum of a 14 day interval.</p> |
| <p>Herbs including:</p> <p>Angelica</p> <p>Balm</p> <p>Basil</p> <p>Borage</p> <p>Burnet</p> <p>Camomile</p> <p>Catnip</p> <p>Chervil (dried)</p> <p>Chive</p> <p>Chive, Chinese</p> <p>Clary</p> <p>Coriander(leaf)</p> <p>Costmary</p> <p>Culantro (leaf)</p> <p>Curry (leaf)</p> <p>Dill (dillweed)</p> <p>Horehound</p> <p>Hyssop</p> <p>Lavender</p> <p>Lovage (leaf)</p> <p>Marigold</p> <p>Marjoram (<i>Origanum spp.</i>)</p> <p>Nasturtium</p> <p>Parsley (dried)</p> <p>Pennyroyal</p> <p>Rosemary</p> <p>Rue</p> <p>Sage</p> <p>Savory, Summer and Winter</p> | 14 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | <p>CLETHODIM 2 EC has not been tested on all herbs, and herb varieties. It is the responsibility of the user to test CLETHODIM 2 EC on a small portion of the crop to be treated before treating the entire field.</p> <p>Crop tolerance should be verified to CLETHODIM 2 EC on a small area of the herb crop, at the desired CLETHODIM 2 EC rate and with the same crop oil concentrate that will be used on the herb field. If no crop response is evident seven (7) days after treatment, CLETHODIM 2 EC may be used on the entire field at the rate tested and with the same crop oil used in the tolerance test.</p> <p>Do not apply more than 8 fl. oz./A in a single application.</p> |

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| | | | | For repeat applications make on a minimum of a 14 day interval. |
| Hops | 21 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval. |
| Leaf Petioles including: Cardoon Celery Celtuce Chinese Celery Fennel, Florence (finocchio) Rhubarb Swiss chard | 30 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval. |
| Leafy Brassica Greens including: Broccoli Raab Chinese Cabbage (bok choy) Collards Kale Mizuna Mustard Greens Mustard Spinach Rape Greens Turnip Greens | 14 days | 6 to 8 fl. oz. | 1 % v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval. |
| Leafy Greens including: Amaranth Chinese Spinach Leafy Amaranth Tampala Arugula (roquette) Chervil Chrysanthemum, Edible-leaved Chrysanthemum, Garland Corn Salad Cress Garden Upland (yellow rock and winter) Dandelion | 14 days | 6 to 8 fl. oz. | 1 % v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval. |

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| Dock (sorrel) Endive (escarole) Lettuce, Head and Leaf Orach Parsley Purslane Garden Winter Radicchio (red chicory) Spinach New Zealand Vine (Indian and Malabar) | | | | |
| Legume Vegetables, Edible Podded including: Bean (<i>Phaseolus spp.</i>) Runner Snap Wax Bean (<i>Vigna spp.</i>) Asparagus Chinese Longbean Moth Yardlong Jackbean Pea (<i>Pisum spp.</i>) Dwarf Edible-pod Snow Sugar Snap Pigeon Sword bean | 21 days | 6 to 8 fl. oz. | 1 qt. by ground or 1% v/v, but not less than 1 pt./A by air. ⁵ | Do not apply more than 8 fl. oz./A in a single application. Do not apply more than one (1) application per acre per season. For peas apply before bloom, but no later than 21 days before harvest. 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. |
| Mint | 21 days | 6 to 16 fl. oz. ⁴ | 1 qt. by ground or 1% v/v, but not less than 1 pt./A by air. | Do not apply more than 16 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval. |
| Mustard Seed | 75 days | 4 to 6 fl. oz. | 1 %, v/v in the finished spray volume. | Do not apply after crop has begun bolting. Crop injury may occur when CLETHODIM 2 EC is applied during the bloom period. |

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| | | | | Do not apply more than 6 fl. oz./A in a single application. |
| | | | | Do not exceed 16 fl. oz./A in a season. |
| Onion (Dry Bulb Only) Garlic Shallot (Dry Bulb Only) | 45 days | 6 to 16 fl. oz. ^{7,8} | 1% v/v in the finished spray volume. | Minimum of 20 gals./A spray volume by ground in the entire US. Minimum of 20 gals./A spray volume in California. ⁹ In states other than California, air applications to onions, garlic or shallots should be made in a minimum of 10 gals./A. |
| Onion, Green including: Green Eschalot Green Shallot Japanese Bunching Onion Leeks Scallion or Spring Onion | 14 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval. |
| Ornamentals | N/A | 6 to 16 fl. oz. | Do not use crop oil concentrate since it may injure flowers and foliage. See Specific Use Instructions. | Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v). Sugar maples cannot be tapped for syrup within one year of CLETHODIM 2 EC application. |
| Non-Bearing Food Crops | NA | 6 to 8 fl. oz. ⁸ | | Do not apply more than 8 fl. oz./A in a single application to non-bearing food crops. |
| Pea, Shelled including: Pea (<i>Pisum spp.</i>) | 30 days | 6 to 8 fl. oz. | 1 qt. by ground or 1% v/v, but not less than 1 | Do not apply more than 8 fl. oz./A per application. |

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| Field Pigeon | | | pt./A by air. ⁵ | <p>Do not apply more than one (1) application per acre per season.</p> <p>Apply before bloom but not later than 30 days prior to harvest.¹⁰</p> <p>Refer to appropriate Table for reduced rate use directions for the control of small annual grasses.</p> <p>The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn.</p> |
| Pea, Succulent Shelled including: Pea (<i>Pisum spp.</i>) English Pea Garden Pea Green Pea Pigeon Pea | 21 days | 6 to 8 fl. oz. | 1 qt. by ground or 1 % v/v, but not less than 1 pt./A by air. ⁵ | <p>Do not apply more than 8 fl. oz./A per application.</p> <p>Do not apply more than one (1) application per acre per season.</p> <p>Apply before bloom but not later than 21 days prior to harvest.¹⁰</p> <p>Refer to appropriate Table for reduced rate use directions for the control of small annual grasses.</p> <p>The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer</p> |

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| | | | | cereals and volunteer corn. |
| Peanut (including Perennial) | 40 days | 6 to 16 fl. oz. | 4 qt. by ground or 1% v/v, but not less than 1 pt./A by air. ⁵ | 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. |
| Potato | 30 days | 6 to 16 fl. oz. | 1 qt by ground or 1% v/v, but not less than 1 pt. per acre by air. ⁵ | The addition of AMS has shown improved grass control for difficult to control weeds including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn. |
| Radish | 15 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. Do not apply more than 16 fl. oz./A (0.25 lb. ai) per acre in a season. For repeat applications make on a minimum of a 14 day interval. |
| Root Vegetables (except Radish), including: Chicory Ginseng Horseradish Turnip | 30 days | 6 to 8 fl. oz. | 1 % v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval. |
| Safflower | 70 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval. |
| Sesame | 14 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | Do not apply during flowering. |

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| | | | | Do not apply more than 8 fl. oz./A in a single application. |
| | | | | For repeat applications make on a minimum of a 14 day interval. |
| Soybean | 60 days | 6 to 16 fl. oz. | 1 qt by ground, or 1% v/v, but not less than 1 pt./A by air. ⁵ | <p>Do not graze treated fields or feed treated forage or hay to livestock.</p> <p>Refer to appropriate Table for reduced rate use directions for the control of small annual grasses.</p> <p>The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> |
| Strawberry | 4 days | 6 to 8 fl. oz. | 1% v/v in the finished spray volume. | <p>Do not apply more than 8 fl. oz./A in a single application.</p> <p>For repeat applications make on a minimum of a 14 day interval.</p> |
| Sugar Beet | 40 days | 6 to 16 fl. oz. | 1 qt. by ground or 1% v/v, but not less than 1 pt./A by air. ⁵ | <p>Refer to appropriate Table for reduced rate use directions for the control of small annual grasses.</p> <p>The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer</p> |

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| | | | | corn. |
| Sunflower | 70 days | 6 to 16 fl. oz. | 1 qt. by ground or 1% v/v, but not less than 1 pt./A by air. ⁵ | 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. |
| Sweet Potato, Yam and other Tuberous and Corm Vegetables (except Potato) including: Artichoke, Chinese or Jerusalem Cassava Bitter Sweet Ginger | 30 days | 6 to 16 fl. oz. | 1% v/v in the finished spray volume. | 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. |
| Tomato | 20 days | 6 to 16 fl. oz. | 1% v/v in the finished spray volume. | For repeat applications make on a minimum of a 14 day interval. |

NA - Not Applicable

Notes Concerning Above CROP SPECIFIC LIMITATIONS AND RESTRICTIONS Table for CLETHODIM 2 EC:

1. Do not use CLETHODIM 2 EC on vegetable crops being grown for seed production unless specific use directions are provided.
2. Acceptable crop oil concentrates would be those which contain a minimum of 80% oils and 15% emulsifier. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all the following criteria: be non phytotoxic, contain only EPA-exempt ingredients, provide good mixing quality and be successful in local experience. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. See the Additional Adjuvant and Crop Oil Concentrate section for further information.
3. CLETHODIM 2 EC 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 mint, the minimum use rate is 10 fl. oz./A.
5. 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N or 32%N), or an equivalent amount (2.5 to 4.0 lbs./A) of spray grade ammonium sulfate (AMS) may be added to CLETHODIM 2 EC applications, in addition to the labelled rate of crop oil concentrate.
6. Do not apply CLETHODIM 2 EC plus 2,4-DB as a tank mix to alfalfa unless the 60 day feeding, grazing, and harvesting restriction on the 2,4-08 label can be observed.
7. For ground applications to garlic or shallot, do not exceed 8 fl. oz./A in a single application. For air applications to onion, garlic or shallot, do not exceed 8 fl. oz./A in a single application. For garlic and shallot, do not exceed 2 applications per season. In California for air applications to onion, do not exceed 2 applications per season.
8. If CLETHODIM 2 EC is applied as a spot treatment to onion, garlic, shallot, or non-bearing food crops, care should be taken to not exceed the maximum rate allowed on a per acre basis, or crop injury might occur.

9. In California, do not apply CLETHODIM 2 EC to onion, garlic, or shallot until the crop has at least two full leaves. In California, apply at 14 day spray intervals between the application of CLETHODIM 2 EC and liquid nitrogen or other herbicide applications. Injury to crop may occur when shorter intervals are observed.
10. Applications of CLETHODIM 2 EC to peas during the bloom period could result in severe crop injury, including loss of yield and delayed maturity.

FOR USE ON:

Alfalfa, Asparagus, Bean (dry) and Pea (shelled)¹, Bean and Pea (succulent shelled)², Broccoli, Cabbage, Canola*, Carrot, Cauliflower (and other Head and Stem Brassica Vegetables)³, Celery, Clover (grown in Idaho, Oregon and Washington only), Conifers, Cotton, Cranberry, Cucumber, Eggplant (and other Fruiting Vegetables)⁴, Fallow Land (and other non-producing agricultural areas), Flax*, Garden Beet, Garlic, Herbs⁵, Hops, Horseradish (and other Root Vegetables)⁶, Legume Vegetables (edible podded)⁷, Lettuce, Head and Leaf (and other leafy greens)⁸, Melons (including Cantaloupes and Watermelons)⁹, Mint, Mustard Greens (and other leafy brassica greens)¹⁰, Mustard Seed*, Non-Bearing Food Crops, Non-Crop or Non-Planted Areas, Onions (dry bulb and green), Ornamentals, Peanut (including Perennial), Peppers (bell and non-bell), Potato, Radish, Rhubarb (and other Leaf Petioles)¹¹, Safflower, Sesame, Shallots (dry bulbs and green), Squash (including Pumpkins)⁹, Soybeans, Strawberry, Sugar Beet, Sunflower, Sweet Potato, Tomato and Yam (and other Tuberous and Corm Vegetables)¹²

*** Not for use in California**

NOTES:

1. Other Bean (dry) and Pea (shelled) crops approved for use with CLETHODIM 2 EC include: Bean (*Lupinus spp.*), grain, sweet, white and white sweet; Bean (*Phaseolus spp.*), field, kidney, lima (dry), navy, pinto and tepary; Bean (*Vigna spp.*), adzuki bean, black-eyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, broad (dry), chickpea (garbanzo), guar, lablab bean and lentil; Pea (*Pisum spp.*), field and pigeon
2. Other Bean and Pea (succulent shelled) crops approved for use with CLETHODIM 2 EC include: Bean (*Lupinus spp.*), grain, sweet, white and white sweet; Bean (*Phaseolus spp.*), field, kidney, lima (dry), navy, pinto and tepary; Bean (*Vigna spp.*), adzuki bean, black-eyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, broad (dry), chickpea (garbanzo), guar, lablab bean and lentil; Pea (*Pisum spp.*), field and pigeon
3. Other Head and Stem Brassica Vegetables approved for use with CLETHODIM 2 EC include: Chinese broccoli, Brussels sprouts, Chinese (napa) cabbage, Chinese mustard, cavalo broccolo and kohlrabi
4. Other Fruiting Vegetables (except tomato) approved for use with CLETHODIM 2 EC include: eggplant, groundcherry, pepino, peppers (all) and tomatillo
5. Other Herb crops approved for use with CLETHODIM 2 EC include: angelica, balm, basil, borage, burnet, camomile, catnip, chervil (dried), chive, Chinese chive, clary, coriander (leaf), costmary, culantro (leaf), curry (leaf), dill (dillweed), horehound, hyssop, lavender, lovage (leaf), marigold, marjoram (*Origanum spp.*), nasturtium, parsley (dried), pennyroyal, rosemary, rue, sage and savory, summer and winter
6. Other Root Vegetables approved for use with CLETHODIM 2 EC include: burdock, edible; celeriac; chervil, turnip-rooted; chicory; ginseng; parsley, turnip-rooted; parsnip; radish, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret and turnip
7. Other Edible Podded Legume Vegetable crops approved for use with CLETHODIM 2 EC include: Bean (*Phaseolus spp.*), runner, snap and wax; Bean (*Vigna spp.*), asparagus, Chinese longbean, moth, yardlong, jackbean; Pea (*Pisum spp.*), dwarf, edible-pod, snow, sugar snap, pigeon and sword bean
8. Other Leafy Greens crops approved for use with CLETHODIM 2 EC include: amaranth (Chinese spinach, leafy amaranth and tampala), arugula (roquette), chervil,

- chrysanthemum (edible-leaved and garland), corn salad, cress (garden, yellow rock and winter), dandelion, dock (sorrel), endive (escarole), lettuce (head and leaf), orach, parsley, purslane (garden and winter), radicchio (red chicory), spinach (New Zealand and Vine (Indian and Malabar))
9. Other cucurbit crops approved for use with CLETHODIM 2 EC include: Chayote (fruit), Chinese Wax Gourd, Citron Melon, Edible Gourd, Gherkin and Muskmelons (all) including Honeydew Melon
 10. Other leafy brassica greens approved for use with CLETHODIM 2 EC include: broccoli raab, Chinese (bok choy) cabbage, collards, kale, mizuna, mustard greens, mustard spinach, rape greens and turnip greens
 11. Other Leaf Petiole crops approved for use with CLETHODIM 2 EC include: cardoon, celtuce, Chinese celery, Florence fennel, and Swiss chard
 12. Other Tuber and Corm Vegetables approved for use with CLETHODIM 2 EC include: arracacha, arrowroot, Chinese artichoke, Jerusalem artichoke, edible burdock, edible canna, bitter and sweet cassava, chayote (root), chufa, dasheen (taro), ginger, leren, taniel, turmeric and bean yam

IMPORTANT

Plant tolerance to CLETHODIM 2 EC 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, the user must 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 have investigated the safety factor to plants not listed on the label.

NON-BEARING FOOD CROPS

CLETHODIM 2 EC SHOULD NOT BE APPLIED TO NON-BEARING FRUIT OR NUT CROPS WHICH ARE GROWN FOR ROOT STOCK.

Crop injury to non-bearing fruit and nut crops can occur if CLETHODIM 2 EC is improperly applied. CLETHODIM 2 EC should not be applied directly over the top of these plant types. Instead, spray should be directed at the base of the plant where grassy weeds are growing near the ground.

Non-bearing fruit and nut crops are plants which will not bear fruit or nuts for at least one year following CLETHODIM 2 EC application.

| COMMON NAME | SCIENTIFIC NAME |
|--------------------|--|
| Apples | <i>Malus spp.</i> |
| Berries | <i>Vaccinium spp.</i> <i>Rubus spp.</i> |
| Cherry, Sweet | <i>Prunus avium</i> |
| Citrus | <i>Citrus spp.</i> |
| Grapes | <i>Vitis spp.</i> |
| Olives | <i>Olea spp.</i> |
| Peaches | <i>Prunus persica</i> |
| Pears | <i>Pyrus communis</i> |
| Prunes | <i>Prunus spp.</i> |
| Stone Fruits | <i>Prunus spp.</i> |
| Strawberries | <i>Fragaria spp.</i> |

| | |
|-----------|--------------------------|
| Tree nuts | |
| Almond | <i>Prunus triloba</i> |
| Filbert | <i>Corylus maxima</i> |
| Pecan | <i>Carya illinoensis</i> |
| Pistachio | <i>Pistacia vera</i> |
| Walnut | <i>Juglans spp.</i> |

CONIFER TREES

CLETHODIM 2 EC can be used to control labeled grasses in Christmas tree farms, conifer nurseries, and conifer plantations (but not in forests).

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

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.

USE DIRECTIONS FOR ANNUAL GRASSES (EXCEPT FOR IN ESTABLISHED ALFALFA AND MINT)

- Apply only to actively growing grasses at labelled weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the labelled growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.
- Do not apply more than 8 fl. oz./A of CLETHODIM 2 EC per application to the following crops: asparagus, carrot, cranberry, cucurbits, flax, fruiting vegetables (except tomato), garden beets, green onion, head and stem brassica vegetables, herbs, hops, leaf petioles, leafy brassica greens, leafy greens, non-bearing food crops, root vegetables, safflower, sesame and strawberry. Do not apply more than 6 fl. oz./A of CLETHODIM 2 EC per application to canola or mustard seed.

| GRASS SPECIES | SCIENTIFIC NAME | WEED HEIGHT* (inches) | RATE FL. OZ./ ACRE | HIGH RATE ¹ |
|-----------------------|-------------------------------|-----------------------|--------------------|------------------------|
| Barnyardgrass | <i>Echinochloa crus-galli</i> | 2 to 8 | 6 | 8 |
| Broadleaf Signalgrass | <i>Brachiaria platyphylla</i> | 2 to 6 | 6 | 8 |

| | | | | |
|------------------------------------|------------------------------------|----------|-----------------|---|
| Brome | | | | |
| California | <i>Bromus carinatus</i> | 2 to 6 | 6 | 8 |
| Cheat | <i>Bromus secalinus</i> | 2 to 6 | 6 | 8 |
| Downy | <i>Bromus tectorum</i> | 2 to 6 | 6 | 8 |
| Ripgut | <i>Bromus diandrus</i> | 2 to 6 | 6 | 8 |
| Canarygrass | <i>Phalaris carlariensis</i> | 1 to 4 | 6 | 8 |
| Crabgrass | | | | |
| Hairy | <i>Digitaria adscendens</i> | 2 to 6** | 6 | 8 |
| Large | <i>Digitaria sanguinalis</i> | 2 to 6** | 6 | 6 |
| Smooth | <i>Digitaria ischaemum</i> | 2 to 6** | 6 | 6 |
| Southern | <i>Digitaria ciliaris</i> | 2 to 6** | 6 | 6 |
| Crowfootgrass | <i>Dactyloctenium aegyptium</i> | 2 to 6** | 6 | 8 |
| Fall Panicum | <i>Panicum dichotomiflorum</i> | 2 to 8 | 6 | 8 |
| Field Sandbur | <i>Cenchrus incertus</i> | 2 to 6 | 6 | 8 |
| Foxtail | | | | |
| Giant | <i>Setaria faberi</i> | 2 to 12 | 6 | 8 |
| Green | <i>Setaria viridis</i> | 2 to 8 | 6 | 8 |
| Yellow | <i>Setaria glauca</i> | 2 to 8 | 6 | 8 |
| Goosegrass | <i>Eleusine indica</i> | 2 to 6** | 6 | 8 |
| Itchgrass | <i>Rottboellia cochinchinensis</i> | 2 to 6 | 6 | 8 |
| Junglerice | <i>Echinochloa colona</i> | 2 to 6 | 6 | 8 |
| Lovegrass | <i>Eragrostis cilianensis</i> | 2 to 6 | 6 | 8 |
| Rabbitsfootgrass | <i>Polypogon monspeliensis</i> | 1 to 4 | 6 | 8 |
| Red Rice | <i>Oryza sativa</i> | 1 to 3 | 6 | 8 |
| Ryegrass | | | | |
| Hardy | <i>Lolium remotum</i> | 2 to 6 | 6 | 8 |
| Italian | <i>Lolium multiflorum</i> | 2 to 6 | 6 | 8 |
| Seedling Johnsongrass | <i>Sorghum halepense</i> | 4 to 10 | 6 | 8 |
| Shattercane | <i>Sorghum bicolor</i> | 6 to 18 | 6 | 8 |
| Southwestern | <i>Eriochloa gracilis</i> | 2 to 6 | 6 | 8 |
| Sprangle Top | | | | |
| Amazon | <i>Leptochloa panicoides</i> | 2 to 6 | 6 | 8 |
| Bearded | <i>Lepfochloa fascicularis</i> | 2 to 6 | 6 | 8 |
| Mexican | <i>Leptochloa uninervia</i> | 2 to 6 | 6 | 8 |
| Red | <i>Leptochloa filiformis</i> | 2 to 6 | 6 | 8 |
| Texas Panicum | <i>Panicum texanum</i> | 2 to 6 | 6 | 8 |
| Volunteer Cereals ² | | | | |
| Barley | <i>Hordeum vulgare</i> | 2 to 6 | 6 | 8 |
| Oats | <i>Avena sativa</i> | 2 to 6 | 6 | 8 |
| Rye | <i>Secale cereale</i> | 2 to 6 | 6 | 6 |
| Wheat | <i>Triticum aestivum</i> | 2 to 6 | 6 | 8 |
| Volunteer Corn ³ | <i>Zea mays</i> | 4 to 12 | 4 | 6 |
| Volunteer Corn ³ | <i>Zea mays</i> | 12 to 24 | 6 | 8 |
| Volunteer Corn (S.R.) ⁴ | <i>Zea mays</i> | 4 to 12 | 8 (suppression) | |
| Volunteer Grain Sorghum | <i>Sorghum bicolor</i> | 8 to 12 | 6 | 8 |
| Wild Oats | <i>Avena fatua</i> | 2 to 6 | 6 | 8 |
| Wild Proso Millet | <i>Panicum miliaceum</i> | 2 to 10 | 6 | 8 |
| Witchgrass | <i>Panicum capillare</i> | 2 to 8 | 6 | 8 |
| Wooly Cupgrass | <i>Eriochloa villosa</i> | 2 to 8 | 6 | 8 |

* Generally occurs between 3-leaf stage and tillering.

** Length of lateral growth.

NOTES:

1. Rates higher than 8 fl. oz./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 may be applied. Do not apply more than 8 fl. oz./A of CLETHODIM 2 EC per application to the following crops: asparagus, carrot, cranberry, cucurbits, flax, fruiting vegetables (except tomato), garden beet, green onion, head and stem brassica vegetables, herbs, hops, leaf petioles, leafy brassica greens, leafy greens, non-bearing food crops, root vegetables, safflower, sesame and strawberry. Do not apply more than 6 fl. oz./A of CLETHODIM 2 EC per application to canola or mustard seed.
2. When a cereal grain crop (such as wheat) is interseeded for crop establishment or is planted as wind breaks to aid crop establishment, the minimum CLETHODIM 2 EC use rate for control is 8 fl. oz./A.
3. Includes Roundup Ready®, Liberty Link® and IMI-CORN® volunteer corn.
4. Sethoxydim resistant volunteer corn.

| USE DIRECTIONS FOR ANNUAL & PERENNIAL GRASS CONTROL IN ESTABLISHED ALFALFA AND MINT WITH CLETHODIM 2 EC | | | |
|--|-------------------|--------------------------|------------------|
| GRASS SPECIES | WEED STAGE | RATE FL. OZ./ACRE | HIGH RATE |
| Annual & Perennial Grasses Listed in Grass Table | See Table | 10 | 16 |

Mowing: The best control of annual grasses can be achieved by applying CLETHODIM 2 EC 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 for partial or complete control.

Irrigated Alfalfa and Mint: Irrigation practices can be very critical to the successful use of CLETHODIM 2 EC in established alfalfa and mint and may be necessary to initiate active growth of the weeds prior to application. Generally applications 2 to 4 days after 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 in a minimum of 10 GPA in established alfalfa and mint when applying by air.

Annual Grass Control: Apply CLETHODIM 2 EC at the grass sizes indicated in the Use Directions for Annual Grass Table and rates indicated. If a grass has been cut, apply CLETHODIM 2 EC after active growth has resumed and regrowth has reached the minimum height and before it reaches the maximum height indicated. Apply before the alfalfa/mint canopy covers the grasses and interferes with the spray coverage. Some annual grasses are spring- and summer-germinating plants, while others are fall-germinating plants, and the time they are actively growing and most susceptible to CLETHODIM 2 EC may vary from region to region. Also some annuals germinate over an extended period of time, and because control of small grasses is desired, applications after each weed flush may be required. As a general rule spray spring- and summer-germinating grasses as early in the season as possible, after initial green-up. Spray fall-germinating weeds in the fall soon after they begin growing but before any damage is done due to frost. Late fall applications may be less effective due to environmental conditions, such as frost, slower plant growth, or the onset of flowering.

Perennial Grass Control: CLETHODIM 2 EC effectively controls perennial grasses such as bermudagrass, Johnsongrass, quackgrass, wirestem muhly, tall fescue, foxtail barley and orchardgrass. Due in part to lack of tillage, perennial grasses are more difficult to control in a perennial crop such as established alfalfa or mint. A program of repeated applications is usually necessary for best results. The best way to control perennial grasses is to do so in the year of stand establishment before rhizomes and stolons become large and difficult to kill.

| USE DIRECTIONS FOR ANNUAL BLUEGRASS CONTROL WITH CLETHODIM 2 EC | | | |
|--|------------|----------------------|-----------|
| GRASS SPECIES | WEED STAGE | RATE FL. OZ./ACRE | HIGH RATE |
| Annual Bluegrass (<i>Poa annua</i>) | to 4-leaf | 6* | 16 |
| 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 to control annual bluegrass in seedling and established alfalfa and mint.

DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES IN CANOLA, BEAN (DRY) & PEA (SHELLED), SOYBEAN, EDIBLE PODDED LEGUME VEGETABLES, FLAX, MUSTARD SEED, BEAN & PEA (SUCCULENT SHELLED) AND SUGAR BEET (REDUCED RATE USE DIRECTIONS NOT FOR USE IN CALIFORNIA)

- Apply only to actively growing grasses at labelled weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the labelled 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 temperature, and/or under very low humidity.

| GRASS SPECIES | SCIENTIFIC NAME | WEED HEIGHT (inches) | RATE FL.OZ/ ACRE ¹ |
|-----------------------|--------------------------------|----------------------|-------------------------------|
| Barnyardgrass | <i>Echinochloa crus-galli</i> | 1 to 4 | 4 |
| Broadleaf Signalgrass | <i>Brachiaria platyphylla</i> | 1 to 4 | 5 |
| Crabgrass | | | |
| Large | <i>Digitaria sanguinalis</i> | 1 to 3* | 4 |
| Large | <i>Digitaria sanguinalis</i> | 1 to 4* | 5 |
| Smooth | <i>Digitaria ischaemum</i> | 1 to 3* | 4 |
| Smooth | <i>Digitaria ischaemum</i> | 1 to 4* | 5 |
| Southern | <i>Digitaria ciliaris</i> | 1 to 4* | 5 |
| Fall Panicum | <i>Panicum dichotomiflorum</i> | 1 to 4 | 4 |
| Foxtail | | | |
| Giant | <i>Setaria faberi</i> | 1 to 4 | 4 |
| Green | <i>Setaria viridis</i> | 1 to 4 | 4 |
| Millet | <i>Setaria italica</i> | 1 to 4 | 5 |
| Yellow | <i>Setaria glauca</i> | 1 to 4 | 4 |
| Seedling Johnsongrass | <i>Sorghum halepense</i> | 1 to 6 | 5 |
| Shattercane | <i>Sorghum bicolor</i> | 4 to 10 | 4 |
| Texas Panicum | <i>Panicum texanum</i> | 1 to 4 | 5 |
| Volunteer Cereals | | | |
| Barley | <i>Hordeum vulgare</i> | 1 to 4 | 5 |
| Oats | <i>Avena sativa</i> | 1 to 4 | 5 |
| Wheat | <i>Triticum aestivum</i> | 1 to 4 | 5 |
| Volunteer Corn** | <i>Zea mays</i> | 4 to 12 | 4 |
| Wild Proso Millet | <i>Panicum miliaceum</i> | 1 to 6 | 4 |
| Wild oats | <i>Avena fatua</i> | 1 to 4 | 5 |

* Length of lateral growth

** Not S.R. Corn

NOTE:

1. Always add Crop Oil Concentrate at 1 qt./A by ground application to the finished spray volume.

USE DIRECTIONS FOR PERENNIAL GRASSES

- Apply only to actively growing grasses at labelled weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the labelled growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.
- Do not apply more than 8 fl. oz./A of CLETHODIM 2 EC per application to the following crops: asparagus, carrot, cranberry, cucurbits, flax, fruiting vegetables (except tomato), garden beet, green onion, head & stem brassica vegetables, herbs, hops, leaf petioles, leafy brassica greens, leafy greens, non-bearing food crops, root vegetables, safflower, sesame and strawberry. Do not apply more than 6 fl. oz./A of CLETHODIM 2 EC per application to canola or mustard seed.

| GRASS SPECIES | WEED HEIGHT (inches) | RATE FL. OZ./ ACRE | HIGH RATE |
|---|-----------------------------|--------------------------|--------------|
| Bermudagrass (<i>Cynodon dactylon</i>) | | | |
| First application | 3 (or up to 6 inch runners) | 8 | 16 |
| Repeat applications (in case of regrowth) | 3 (or up to 6 inch runners) | 8 | 16 |
| Fescue, Tall (<i>Festuca arundinacea</i>) | | | |
| First application | 4 to 8 | 8 | 16 |
| Repeat applications (in case of regrowth) | 4 to 8 | 8 | 16 |
| Foxtail Barley (<i>Hordeum jubatum</i>) | | | |
| First application | 2 to 6 | 8 | 16 |
| Repeat applications (in case of regrowth) | 2 to 6 | 8 | 16 |
| Orchardgrass (<i>Dactylis glomerata</i>) | | | |
| First application | 4 to 8 | 8 | 16 |
| Repeat applications (in case of regrowth) | 4 to 8 | 8 | 16 |
| Quackgrass* (<i>Elytrigia repens</i>) | | | |
| First application | 4 to 12 | 8 | 16 |
| Repeat applications (in case of regrowth) | 4 to 12 | 8 | 16 |
| Rhizome johnsongrass (<i>Sorghum halapense</i>) | | | |
| First application | 12 to 24 | 8 | 16 |
| Repeat applications (in case of regrowth) | 6 to 18 | 6 | 8 |
| Wirestem muhly (<i>Muhlenburgia frondosa</i>) | | | |
| First application | 4 to 8 | 8 | 16 |
| Repeat applications (in case of regrowth) | 4 to 8 | 8 | 16 |
| Perennial Bluegrasses*: Roughstalk (<i>Poa trivialis</i>), Kentucky (<i>Poa pratensis</i>) | | | |
| First application | 2 to 4 | 8 | 16 |
| Repeat applications (in case of regrowth) | 2 to 4 | 8 | 16 |
| Bentgrass* (<i>Agrostis spp.</i>) | | | |
| First application | 2 to 4 | - | 16 |
| Repeat applications (in case of regrowth) | 2 to 4 | - | 16 |

* Control of quackgrass, perennial bluegrass and bentgrass with CLETHODIM 2 EC may be enhanced by adding AMS at 2.5 to 4.0 lbs./A.

TANK MIXES GENERAL INFORMATION

The labels for each of the herbicides labelled for tank mixing with CLETHODIM 2 EC are unique to the characteristics of those products and contain restrictions and limitations that may be more restrictive than the CLETHODIM 2 EC label in certain considerations. Those concerns may include, but are not limited to:

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

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

TANK MIX APPLICATION OF CLETHODIM 2 EC AND BROADLEAF HERBICIDES FOR CONTROL OF GRASSES AND BROADLEAF WEEDS

- Apply only to actively growing grass and broadleaf weeds at labelled height or growth stage listed on each label.
- Apply when the first grass or broadleaf weed species in a mixed population reaches the labelled height or growth stage for treatment.
- Apply under favorable soil moisture and humidity that exist a few days after rainfall or within seven days after irrigation.
- Always add the appropriate adjuvant to the spray mix at the rate listed on the label 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, as specified in the respective size and rate tables.
- Do not tank mix CLETHODIM 2 EC when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.

MIXING INSTRUCTIONS

1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water.
2. While agitating, add the correct amount of CLETHODIM 2 EC. Agitation should create a rippling or rolling action on the water surface.
3. If tank mixing CLETHODIM 2 EC 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.

to do so can result in crop injury to alfalfa. Do not feed, graze, or harvest alfalfa for 30 days following an application of PURSUIT to alfalfa.

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 plus BUCTRIL or BUCTRIL GEL tank mix must be applied in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 2 trifoliates. Unacceptable crop injury may occur to alfalfa seedlings less than the 2 trifoliolate leaf stage. CLETHODIM 2 EC plus BUCTRIL or BUCTRIL GEL applications made when temperatures are expected to exceed 80° F at (and 3 days following) application can result in unacceptable crop injury. In the states not listed above, apply in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 4 trifoliolate leaves. When alfalfa stand is uneven and conditions favor leaf burn, unacceptable crop injury may occur to alfalfa in the 2 trifoliolate or smaller stage of growth. CLETHODIM 2 EC plus BUCTRIL or BUCTRIL GEL applications made when temperatures are expected to exceed 70°F at (and 3 days following) application can result in unacceptable crop injury. Crop leaf burn can occur following CLETHODIM 2 EC plus BUCTRIL or BUCTRIL GEL application. Warm, humid conditions may enhance leaf burn. New crop growth will not be affected.
7. Do not apply when alfalfa is under moisture, temperature, insect or disease stress or has been stressed by other pesticide carryover or application.

CANOLA

Table 2. REDUCED RATE CLETHODIM 2 EC TANK MIXED WITH BROADLEAF HERBICIDES FOR CONTROL OF ANNUAL GRASS¹ AND BROADLEAF WEEDS IN CANOLA

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

| PRODUCT MIXTURE | APPLICATION RATES/ACRE | | AMMONIUM SULFATE | |
|-----------------------------|-----------------------------|--|------------------|----------|
| | ANNUAL GRASSES ¹ | | GROUND | AIR |
| CLETHODIM 2 EC ² | 4 to 5 fl. oz. | | 3.0 lbs. | 3.0 lbs. |
| + | + | | | |
| LIBERTY ³ | 34 fl. oz. | | | |

NOTES:

1. Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES table.
2. Do not apply CLETHODIM 2 EC tank mix during or after bolting or flowering or crop injury may occur.
3. For use only on Libertylink® canola

COTTON

Table 3. REDUCED RATE TANK MIXES WITH COBRA® AND MSMA APPLIED POST DIRECTED TO COTTON

| PRODUCT MIXTURE ¹ | APPLICATION RATES/ACRE ² | | CROP OIL CONCENTRATE ³ v/v | COMMENTS |
|------------------------------|---|-------------------|--|--|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND ONLY | |
| CLETHODIM 2 EC ⁴ | 6 to 8 fl. oz. | 8 to 16 fl. oz. | 1% | Reduce broadcast rate in proportion to the band area |
| + | See COBRA label for rates to control broadleaf weeds and height limits for cotton. Refer to the | | | |
| COBRA | | | | |
| + | | | | |

4. Add any required adjuvants (crop oil concentrate, non-ionic surfactant and/or nitrogen solution).
5. Fill spray tank to desired level with water. **Agitation should continue until all spray solution has been applied.**

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

INFORMATION ON ANTAGONISM

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

ALFALFA

Table 1. CLETHODIM 2 EC TANK MIXES WITH BROADLEAF HERBICIDES FOR ALFALFA

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

| PRODUCT MIXTURE ² | APPLICATION RATES/ACRE ¹ | | CROP OIL CONCENTRATE ³ | |
|---|---|---|-----------------------------------|------|
| | ANNUAL GRASSES | PERENNIAL GRASSES | v/v | |
| | | | GROUND | AIR |
| CLETHODIM 2 EC + 2,4-DB ⁴ | 10 to 16 fl. oz. Refer to 2,4-DB label | 10 to 16 fl. oz. Refer to 2,4-DB label | 1% | 1% |
| CLETHODIM 2 EC + PURSUIT DG ⁵ or PURSUIT ⁵ | 10 to 16 fl. oz. + 1.08 to 2.16 oz. or 3 to 6 fl. oz. | - | 1% | 1% |
| CLETHODIM 2 EC + BUCTRIL® 2L ⁶ or BUCTRIL GEL ^{6,7} | 10 to 16 fl. oz. + 1.0 to 1.5 pts. or 0.5 to 0.75 pt. | - | 0.5% | 0.5% |

NOTES:

1. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC alone (without a tank mix herbicide), according to the appropriate size and rate use directions.
2. Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Do not tank mix 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 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 PURSUIT or PURSUIT DG labels for geographical restrictions and restrictions regarding alfalfa growth stage and type. Failure

| | | |
|--|---|-------------------|
| MSMA 4 lbs./gal. OR MSMA 6.6 lbs./gal. | CLETHODIM 2 EC label for weed height and species controlled. | actually treated. |
| | See MSMA label for rates to control broadleaf weeds and height limits for cotton. Refer to the CLETHODIM 2 EC label for weed height and species controlled. | |

NOTES:

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. Do not tank mix in these situations.
2. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC alone (without a tank mix herbicide), according to the appropriate size and rate use directions.
3. Always use a Crop Oil Concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.
4. If at the time of application, grass 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 may be necessary.

Table 4. CLETHODIM 2 EC TANK MIXED WITH BUCTRIL 4 EC TO CONTROL EMERGED BROADLEAF AND ANNUAL GRASS WEEDS IN BXN COTTON AS A BROADCAST APPLICATION

| PRODUCT MIXTURE ¹ | APPLICATION RATE/ACRE ² | CROP OIL CONCENTRATE/ACRE ³ | COMMENTS ⁷ |
|--|--|--|------------------------------------|
| CLETHODIM 2 EC + BUCTRIL 4 EC ^{4,5,6} | 8 to 16 fl. oz. | 1 qt. | See charts for grasses controlled. |
| | See BUCTRIL 4 EC label for rates to control broadleaf weeds and height restrictions for cotton | | |

NOTES:

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 at the labelled rate with the appropriate amount of crop oil concentrate in a non-BUCTRIL tank mix.
3. Always add a crop oil concentrate at 1 qt./A by ground in the finished spray solution.
4. Applications of BUCTRIL 4 EC can be made only to cotton that has been genetically modified for crop tolerance to postemergence over-the-top applications of bromoxynil.
5. Do not apply the CLETHODIM 2 EC plus BUCTRIL tank mix within 75 days of harvest.
6. Do not exceed 2 applications of BUCTRIL 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 TANK MIXED WITH GLYPHOSATE TO CONTROL EMERGED GRASSES IN COTTON AS A BROADCAST APPLICATION

| PRODUCT MIXTURE | APPLICATION RATE/ACRE ¹ | | ADJUVANT | | COMMENTS |
|-----------------|------------------------------------|-------------------|-------------------------------------|--|------------|
| | ANNUAL GRASSES | PERENNIAL GRASSES | Glyphosate with built in surfactant | Glyphosate without built in surfactant | |
| CLETHODIM 2 | 6 to 8 fl. oz. | 8 to 16 fl. oz. | Nonionic | Crop oil | See charts |

| | | | | |
|-----------------------|--|---|---|--|
| EC + GLYPHOSATE | See Glyphosate product label for rates to control broadleaf weeds and height limitations for cotton. | surfactant at 0.125 to 0.25% v/v PLUS ammonium sulfate at 8.5 to 17 lbs. per 100 gals. water | concentrate at 1 pt./A PLUS ammonium sulfate at 8.5 to 17 lbs. per 100 gals. water | for grasses controlled. Use a minimum of 10 gals. of spray dilution per acre. |
|-----------------------|--|---|---|--|

NOTE:

1. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC at the labelled rate with the appropriate amount of crop oil concentrate.

BEAN (DRY AND SUCCULENT SHELLED)

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

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

| PRODUCT MIXTURE ² | APPLICATION RATES/ACRE ¹ | | CROP OIL CONCENTRATE ³ v/v | |
|----------------------------------|-------------------------------------|--------------------------------------|--|-----|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| CLETHODIM 2 EC + BASAGRAN® | 8 to 10 fl. oz. + 1 to 2 pts. | 10 to 16 fl. oz. + 1 to 2 pts. | 1% | 1% |

NOTES:

1. If regrowth occurs or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC alone (without a tank mix herbicide) according to the appropriate size and rate use directions.
2. Broadleaf weed control may be reduced when grass populations are tall enough or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Do not tank mix 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 TANK MIXES WITH BROADLEAF HERBICIDES FOR FLAX (LISTED BROADLEAF AND ANNUAL GRASS WEEDS ONLY)

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

| PRODUCT MIXTURES | APPLICATION RATE/ACRE | CROP OIL CONCENTRATE v/v | |
|---|-------------------------------------|-----------------------------|-------|
| | ANNUAL GRASSES ¹ | GROUND | AIR |
| CLETHODIM 2 EC + BRONATE ADVANCED™ ^{2,3} | 4 to 5 fl. oz. + 11.4 fl. oz. | 1 pt. | 1 pt. |
| CLETHODIM 2 EC | 4 to 5 fl. oz. | 1 pt. | 1 pt. |

| | | | |
|---|--------------------------------------|-------|-------|
| + BRONATE® ^{2,3} | + 0.9 pt. | | |
| CLETHODIM 2 EC + BUCTRIL ^{2,3} | 4 to 5 fl. oz. + 1 pt. | 1 pt. | 1 pt. |
| CLETHODIM 2 EC + RHONOX® ^{2,3} | 4 to 5 fl oz + 0.25 to 0.5 pt. | 1 pt. | 1 pt. |

NOTES:

1. Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES table.
2. Do not apply CLETHODIM 2 EC tank mix during or after the bud stage or to ornamental flax or crop injury may occur.
3. Do not apply tank mixes if temperatures are expected to exceed 85°F at (or 3 days following) application or crop injury may occur.

SOYBEAN

Table 8. CLETHODIM 2 EC TANK MIXES³ TO CONTROL ANNUAL GRASSES WHEN USED AS A BURNDOWN IN NO-TILL SOYBEAN

| PRODUCT MIXTURE | APPLICATION RATE/ACRE ¹ | GRASS HEIGHT (inches) | CROP OIL CONCENTRATE/ACRE ² | 28%N or 32%N qts./A or 2.5 to 4 lbs. AMS |
|--|------------------------------------|---|--|--|
| CLETHODIM 2 EC + 2,4-D ESTER* ³ | 3 fl. oz. | Foxtail: 1 to 3 Fall Panicum: 1 to 3 | 1 qt. | 1 to 2 qts. or 2.5 to 4 lbs. AMS |
| | 4 fl. oz. | Foxtail: 1 to 4 Fall Panicum: 1 to 4 | 1 qt. | 1 to 2 qts. or 2.5 to 4 lbs. AMS |
| | 6 to 8 fl. oz. + 0.5 lb./A | See Grass Chart for grasses claimed. | 1 qt. | 1 to 2 qts. or 2.5 to 4 lbs. AMS |

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

NOTES:

1. If regrowth occurs or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC according to the appropriate size and rate use directions.
2. Always use a crop oil concentrate at the listed rate in the finished spray volume.
3. The following products can be tank mixed with CLETHODIM 2 EC plus 2,4-D ester: VALOR®, AUTHORITY® BROADLEAF, CANOPY XL®, DUAL® 8E, DUAL II®, DUAL MAGNUM®, PROWL®, SENCOR®, SENCOR plus the DUAL products and TURBO®.

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

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

| PRODUCT | APPLICATION RATES/ACRE ¹ | CROP OIL |
|---------|-------------------------------------|----------|
|---------|-------------------------------------|----------|

| MIXTURES ² | | | CONCENTRATE ³ v/v | |
|---|---|--|------------------------------|-----------------|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| CLETHODIM 2 EC + COBRA | 6 to 8 fl. oz. + 12.5 fl. oz. | 8 to 16 fl. oz. + 12.5 fl. oz. | 0.5 - 1% | 1% |
| CLETHODIM 2 EC + BASAGRAN 4 SL | 8 to 10 fl. oz. + 1 to 2 pts. | 10 to 16 fl. oz. + 1 to 2 pts. | 1% | 1% |
| CLETHODIM 2 EC + Glyphosate (Roundup Ready Soybean only) | 6 to 8 fl. oz. + 0.75 to 3.0 lbs. ai | 8 to 16 fl. oz. + 0.75 to 3.0 lbs. ai | 0.5 - 1% ⁴ | 1% ⁴ |
| CLETHODIM 2 EC + ULTRA BLAZER | 6 to 8 fl. oz. + 1 to 1.5 pts. | 6 to 8 fl. oz. + 1 to 1.5 pts. | 0.5 - 1% | 1% |
| CLETHODIM 2 EC + FLEXSTAR® HL ⁶ | 6 to 8 fl. oz. Refer to the FLEXSTAR HL label for specific application rates. | 8 to 16 fl. oz. Refer to the FLEXSTAR HL label for specific application rates. | 1% | 1% |
| CLETHODIM 2 EC + CLASSIC® 25 DG | 8 to 10 fl. oz. + 0.5 to 0.75 oz. | 10 to 16 fl. oz. + 0.5 to 0.75 oz. | 1% | 1% |
| CLETHODIM 2 EC ⁴ + PURSUIT® 70 DG | 6 to 8 fl. oz. + 1.44 oz. | 8 to 16 fl. oz. + 1.44 oz. | 1% | 1% |
| CLETHODIM 2 EC ⁵ + COBRA + CLASSIC 25 DG | 8 to 10 fl. oz. + 6 to 8 fl. oz. + 0.5 to 0.75 oz. | - | 0.5% | 1% |
| CLETHODIM 2 EC ⁵ + COBRA + BASAGRAN 4 SL | 8 to 10 fl. oz. + 6 to 10 fl. oz. + 1 to 1.5 pts. | - | 0.5% | 1% |
| CLETHODIM 2 EC ⁵ + COBRA + PURSUIT 70 DG | 8 to 10 fl. oz. + 6 to 10 fl. oz. + 1.44 oz. | - | 0.5% | 1% |
| CLETHODIM 2 EC ⁵ + STORM® | 8 to 10 fl. oz. + 1.5 pts. | - | 0.5% | 1% |
| CLETHODIM 2 EC ⁵ + RESOURCE® | 8 to 10 fl. oz. + 4 fl. oz. + | - | 1% | 1% |

| | | | | |
|-----------------------------|--|---------------------|-------|----|
| PURSUIT 70 DG | 1.44 oz. | | | |
| CLETHODIM 2 EC ⁵ | 8 to 10 fl. oz. | - | 1% | 1% |
| + RESOURCE | + 4 fl. oz. | | | |
| + BASAGRAN | + 1 pt. | | | |
| CLETHODIM 2 EC ⁵ | 8 to 10 fl. oz. | - | 1% | 1% |
| + RESOURCE | + 4 fl. oz. | | | |
| + CLASSIC | + 0.5 oz. | | | |
| CLETHODIM 2 EC ⁵ | 6 to 8 fl. oz. | - | 0.5% | 1% |
| + COBRA | + 6 fl. oz. | | | |
| + RESOURCE | + 4 fl. oz. | | | |
| CLETHODIM 2 EC ⁵ | 6 to 8 fl. oz. | 8 to 16 fl. oz. | 1% | - |
| + FIRSTRATE® | + 0.3 oz. | + 0.3 oz. | | |
| CLETHODIM 2 EC ⁵ | 6 to 8 fl. oz. | 8 to 16 fl. oz. | 1% | - |
| + COBRA | + 6 to 8 fl. oz. | + 6 to 8 fl. oz. | | |
| + FIRSTRATE | + 0.3 oz. | + 0.3 oz. | | |
| CLETHODIM 2 EC ⁵ | 6 to 8 fl. oz. | - | 1% | - |
| + RAPTOR® (1 AS) | + 4 to 5 fl. oz. | | | |
| CLETHODIM 2 EC ⁵ | 6 to 8 fl. oz. | - | 1% | - |
| + COBRA | + 6 to 8 fl. oz. | | | |
| + RAPTOR (1 AS) | + 4 to 5 fl. oz. | | | |
| CLETHODIM 2 EC ⁵ | 6 to 8 fl. oz. ⁷ | - | 1 qt. | - |
| + SYNCHRONY® STS™ | + 0.5 oz./A | | | |
| CLETHODIM 2 EC ⁵ | 6 to 8 fl. oz. ⁷ | - | 1 pt. | - |
| + COBRA Herbicide | + 4 to 8 fl. oz. | | | |
| + SYNCHRONY STS | + 0.5 oz. | | | |
| CLETHODIM 2 EC ⁵ | 6 to 8 fl. oz. | - | 1 qt. | - |
| + RESOURCE | + 4 to 12 fl. oz. | | | |
| CLETHODIM 2 EC ⁵ | 8 to 10 fl. oz. | - | 1% | - |
| + FRONTROW™ | + Refer to FRONTROW label for use rates. | | | |

| | | | | |
|--------------------------|---|---|----|---|
| CLETHODIM 2 EC | 6 to 8 fl. oz. | 8 to 16 fl. oz. | 1% | - |
| + | + | + | | |
| FIRSTRATE | 0.3 oz. | 0.3 oz. | | |
| + | + | + | | |
| FLEXSTAR HL ⁵ | Refer to FLEXSTAR HL label for specific application rates. | Refer to FLEXSTAR HL label for specific application rates. | | |

NOTES:

1. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC alone (without a tank mix herbicide), according to the appropriate size and rate use directions.
2. Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Do not tank mix in these situations.
3. Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.
4. The addition of 2.5 lbs. of ammonium sulfate is required when CLETHODIM 2 EC 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. Add 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N, or 32%N) when CLETHODIM 2 EC is tank mixed with PURSUIT, RESOURCE, STORM, FIRSTRATE, SYNCHRONY, RAPTOR, FRONTROW, COBRA plus CLASSIC, COBRA plus BASAGRAN, COBRA plus PURSUIT, COBRA plus FIRSTRATE, COBRA plus SYNCHRONY, and COBRA plus RAPTOR. An equivalent amount (2.5 to 4.0 lbs./A) of spray grade ammonium sulfate (AMS) may be added in place of liquid fertilizer. Fertilizer adjuvants are to be added in addition to the crop oil concentrate.
6. Refer to FLEXSTAR HL label for geographic and rotational restrictions.
7. Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES table.

Table 10. REDUCED RATE CLETHODIM 2 EC TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN

(Refer to Table for reduced rates to control small annual grasses in canola, dry bean & shelled pea, soybean, edible podded legume vegetables, flax, mustard seed, succulent shelled bean & pea and sugar beet for use directions for specific grasses and growth stages.)

| PRODUCT MIXTURES | APPLICATION RATE/ACRE ¹ | CROP OIL CONCENTRATE v/v ^{3,4} | |
|---------------------|------------------------------------|--|-----|
| | ANNUAL GRASSES ² | GROUND | AIR |
| CLETHODIM 2 EC + | 4 to 8 fl. oz. | 1% | 1% |
| FIRSTRATE | + | | |
| | 0.3 oz. | | |
| CLETHODIM 2 EC + | 4 to 6 fl. oz. | 1% | 1% |
| PURSUIT 70 DG | + | | |
| | 1.44 oz. | | |

NOTES:

1. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC alone (without a tank mix herbicide), according to the appropriate size and rate use directions.
2. Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES table.
3. Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.
4. The addition of 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N, or 32%N) is required when CLETHODIM 2 EC is tank mixed at reduce rates. An equivalent amount (2.5 to 4.0 lbs./A) of spray grade ammonium sulfate (AMS) may be added in place of liquid fertilizer. Fertilizer adjuvants are to be added in addition to the crop oil concentrate.

PEANUT (INCLUDING PERENNIAL)

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

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

| PRODUCT MIXTURES | APPLICATION RATE/ACRE ¹ | CROP OIL CONCENTRATE v/v ³ | |
|-------------------------------------|---|--|-----|
| | ANNUAL GRASSES ² | GROUND | AIR |
| CLETHODIM 2 EC + BASAGRAN | 8 to 10 fl. oz. + 1 to 2 pts. | 1% | 1% |
| CLETHODIM 2 EC + ULTRA BLAZER | 8 to 10 fl. oz. + 0.5 to 1.5 pts. | 1% | 1% |
| CLETHODIM 2 EC + STORM | 8 to 10 fl. oz. + 1.5 pts. | 1% | 1% |

NOTES:

1. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC alone (without a tank mix herbicide), according to the appropriate size and rate use directions.
2. Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Do not tank mix 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.

| USE DIRECTIONS FOR GRASS SUPPRESSION FOR HARVEST EFFICIENCY IN PEANUT (INCLUDING PERENNIAL) WITH CLETHODIM 2 EC | | | |
|--|---|----------------------|-----------|
| GRASS SPECIES | WEED STAGE | RATE FL. OZ./ACRE | HIGH RATE |
| Annual and perennial grasses that exceed height claimed for control on height charts "USE DIRECTIONS FOR ANNUAL GRASSES" & "USE DIRECTIONSS PERENNIAL GRASSES" | Up to and including grasses in the seed head stage. | 16 | 32 |

Do not apply as part of a tank mix when applying CLETHODIM 2 EC 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 TANK MIXED WITH STINGER® APPLIED TO SUGAR BEET

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

| PRODUCT MIXTURE ² | APPLICATION RATES/ACRE ¹ | | CROP OIL CONCENTRATE ³ v/v | |
|--------------------------------|-------------------------------------|-------------------|---------------------------------------|-----|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| CLETHODIM 2 EC + STINGER | 6 to 8 fl. oz. | 8 to 16 fl. oz. | 1% | 1% |
| | See STINGER label for rates. | | | |

NOTES:

1. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC alone (without a tank mix herbicide), according to the appropriate size and rate use directions.
2. Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Do not tank mix in these situations.
3. Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

Table 13. CLETHODIM 2 EC TANK MIXED WITH BETAMIX® or BETANEX® APPLIED TO SUGAR BEET

| PRODUCT MIXTURE ¹ | WEEDS CONTROLLED | | WEED HEIGHT (inches) | APPLICATION RATE/ACRE ² |
|--|-------------------|--|--|------------------------------------|
| | COMMON NAME | SCIENTIFIC NAME | | |
| CLETHODIM 2 EC ³ + BETAMIX or BETANEX | Barnyardgrass | <i>Echinochloa crus-galli</i> | 1 to 3 | 8 fl. oz. |
| | Foxtail | <i>Setaria spp.</i> | 1 to 3 | |
| | Foxtail Millet | <i>Setaria italica</i> | 1 to 3 | |
| | Wild Oat | <i>Avena fatua</i> | 1 to 3 | |
| | Wild Proso Millet | <i>Panicum miliaceum</i> | 1 to 3 | |
| | | | See BETAMIX label for rates to control broadleaf weeds. Do not use additives are in the tank mix. | |
| | | See BETANEX label for rates to control broadleaf weeds. Do not use additives in the tank mix. | | |

NOTES:

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. Do not tank mix in these situations.
2. Do not use crop oil concentrate. Do not use additives in the tank mix. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of

- CLETHODIM 2 EC alone (without a tank mix herbicide), according to the appropriate size and rate use directions.
3. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC at full label rate with appropriate rate of crop oil concentrate.

TABLE 14. CLETHODIM 2 EC PLUS BETANEX OR BETAMIX TANK MIX FOR THREE SEQUENTIAL APPLICATIONS FOR ANNUAL GRASS CONTROL (MICRO-RATE APPLICATION)

| PRODUCT MIXTURE | APPLICATION RATE/ACRE ¹ | | METHYLATED SEED OIL ² v/v | |
|-------------------------------------|---|---|--------------------------------------|------|
| | ANNUAL GRASSES | GRASSES CONTROLLED (inches) | GROUND | AIR |
| CLETHODIM 2 EC + BETANEX or BETAMIX | 2 to 3 fl. oz. + 8 to 12 fl. oz. ³ or 8 to 12 fl. oz. ³ | Green Foxtail (1-2) Yellow Foxtail (1-2) Barnyardgrass (1-2) Wild Oat (1-2) Volunteer Cereals (1-2) | 1.5% | 1.5% |

- NOTES:
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. Do not tank mix in these situations.
 2. Always use a methylated seed oil at the listed rate (but not less than 1 pt./A) in the finished spray volume.
 3. Use 8 fl. oz./A rate when sugar beets are in the cotyledon to 4 leaf stage. Rate can be increased up to 12 fl. oz./A when the smallest sugar beet plants in the field are in the 4 true leaf stage or larger.

Directions for Use for Micro-Rate Applications to Sugar Beet

General Information

Multiple micro-rate applications of CLETHODIM 2 EC in tank mixtures with reduced rates of BETANEX or BETAMIX and methylated seed oils may be applied by air or ground equipment to sugar beet to control early germinating annual grasses listed above. The rate of BETANEX or BETAMIX must not exceed 0.12 lbs. ai/A (broadcast application) when in combination with these spray adjuvants. Note that maximum rate allowed varies depending on crop growth stage. The use of wetting agents or spray adjuvants with conventional rates (0.73 to 1.22 lbs. ai/A) or multiple low rate (0.24 to 0.73 lbs. ai/A) applications of BETANEX or BETAMIX is prohibited on the BETANEX and BETAMIX master label. Favorable climatic conditions (good conditions for plant growth and development) are essential for adequate weed control. All use precautions and restrictions on the BETANEX and BETAMIX master labels must be followed.

Directions for Using Micro-Rate Multiple Applications of CLETHODIM 2 EC Tank Mixes

Apply CLETHODIM 2 EC in broadcast applications only at a rate of 2 to 3 fl. oz./A in tank mixture with either BETANEX or BETAMIX following the directions for use on the tank mix partner label. A minimum of three sequential applications of 2 fl. oz./A or a minimum of 2 sequential applications of 3 fl. oz./A should be utilized for CLETHODIM 2 EC tank mixtures. A minimum of 3 sequential applications of BETAMIX or BETANEX should be used. Accurate timing is essential; make initial application immediately after weeds

emerge, and make repeat applications on 5 to 7 day intervals. If weed control is not adequate due to climatic conditions, spray coverage or other factors, return to conventional application rates of CLETHODIM 2 EC (6 to 8 fl. oz./A) and add rates of BETANEX or BETAMIX as directed on their label. When using conventional rates of BETANEX or BETAMIX in tank mixtures with CLETHODIM 2 EC, do not use a spray adjuvant.

Use Precautions for Micro-Rate Applications: (See CLETHODIM 2 EC, BETANEX and BETAMIX master label for further use precautions.)

Not all weeds will be adequately controlled, even with favorable climatic conditions. Conventional rates of CLETHODIM 2 EC, BETANEX or BETAMIX and/or hand labor may be required if multiple micro-rate applications do not adequately control weeds. Plugging of spray nozzles may be encountered due to the potential for formation of a precipitate in the spray solution that is often associated with micro-rate applications. 1878673 ONTARIO, INC. will not be responsible for any nozzle plugging that may occur with the use of multiple micro-rate applications. Methylated seed oils must not be added if the BETANEX or BETAMIX rate exceeds 0.12 lbs. ai/A broadcast, as the addition of methylated seed oils could increase the possibility of crop injury at dosage rates greater than 0.12 lbs. ai/A.

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 should reflect a minimum of 30 psi and a maximum of 60 psi at the nozzle. Do not use flood nozzles.

AERIAL APPLICATION

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

Table 15. TANK MIX APPLICATION OF CLETHODIM 2 EC AND FUNGICIDES FOR CONTROL OF GRASS WEEDS AND DISEASES IN SUGAR BEET

| PRODUCT MIXTURE ² | APPLICATION RATES/ACRE ¹ | | CROP OIL CONCENTRATE ³ v/v |
|------------------------------|-------------------------------------|-------------------|---------------------------------------|
| | ANNUAL GRASSES | PERENNIAL GRASSES | |
| CLETHODIM 2 EC | 6 to 8 fl. oz. | 8 to 16 fl. oz. | 1% |
| + EMINENT® | + 13 fl. oz. | + 13 fl. oz. | |

NOTES:

1. If grass regrowth occurs, or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC alone (without a tank mix fungicide) according to the appropriate size and rate use directions.
2. Refer to CLETHODIM 2 EC and fungicide label for rates and weeds and diseases controlled.
3. Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

Table 16. TANK MIX APPLICATION OF CLETHODIM 2 EC AND INSECTICIDES FOR CONTROL OF GRASS WEEDS AND INSECTS IN ALFALFA, COTTON, MINT, PEANUT (INCLUDING PERENNIAL), SOYBEAN AND SUNFLOWER

| PRODUCT | APPLICATION RATES/ACRE ¹ | CROP OIL | CROP |
|---------|-------------------------------------|----------|------|
|---------|-------------------------------------|----------|------|

| MIXTURE ² | ANNUAL GRASSES | PERENNIAL GRASSES | CONCENTRATE ³ v/v | Alfalfa ⁴ | Cotton | Mint ^{4,5} | Peanut | Soybean | Sunflower |
|--|---|--|---------------------------------|----------------------|--------|---------------------|--------|---------|-----------|
| CLETHODIM 2 EC + ORTHENE® 75 S or ORTHENE 97 | 6 to 8 fl. oz. + 0.33 to 1.33 lbs. or 0.25 to 1.0 lb. | 8 to 16 fl. oz. + 0.33 to 1.33 lbs. or 0.25 to 1.0 lb. | 1% | | X | X | X | | |
| CLETHODIM 2 EC + ORTHENE 90 S ⁶ | 6 to 8 fl. oz. + 0.25 to 1 lb. | 8 to 16 fl. oz. + 0.25 to 1 lb. | 1% | | X | X | X | X | |
| CLETHODIM 2 EC + DANITOL® 2.4 EC | 6 to 8 fl. oz. + 10 2/3 to 16 fl. oz. | 8 to 16 fl. oz. + 10 2/3 to 16 fl. oz. | 1% | | X | | X | | |
| CLETHODIM 2 EC + ASANA XL® | 6 to 8 fl. oz. + Refer to ASANA XL label | 8 to 16 fl. oz. + Refer to ASANA XL label | 1% | | | | | | X |
| CLETHODIM 2 EC + WARRIOR® | 6 to 8 fl. oz. + Refer to WARRIOR label | 8 to 16 fl. oz. + Refer to WARRIOR label | 1% | | | | | | X |
| CLETHODIM 2 EC + WARRIOR | 10 to 16 fl. oz. + Refer to WARRIOR label | 10 to 16 fl. oz. + Refer to WARRIOR label | 1% | X | | | | | |
| CLETHODIM 2 EC + BAYTHROID® | 10 to 16 fl. oz. + Refer to BAYTHROID label | 10 to 16 fl. oz. + Refer to BAYTHROID label | 1% | X | | | | | |
| CLETHODIM 2 EC + DIMETHOATE® | 10 to 16 fl. oz. + Refer to DIMETHOATE label | 10 to 16 fl. oz. + Refer to DIMETHOATE label | 1% | X | | | | | |
| CLETHODIM 2 EC + LORSBAN® | 10 to 16 fl. oz. + Refer to LORSBAN label | 10 to 16 fl. oz. + Refer to LORSBAN label | 1 to 2 pts. ⁸ | X | | | | | |
| CLETHODIM 2 EC + POUNCE® | 10 to 16 fl. oz. + Refer to POUNCE label | 10 to 16 fl. oz. + Refer to POUNCE label | 1% | X | | | | | |

NOTES:

1. If grass regrowth occurs, or an additional flush of new grass emerges, make a second application of CLETHODIM 2 EC alone (without a tank mix insecticide) according to the appropriate size and rate use directions.
2. Refer to CLETHODIM 2 EC 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 mint foliage. Refer to the insecticide label for further information. It is suggested that prior to using any of these insecticide/herbicide tank mixtures, that a small area of the field be treated first and observations for crop injury be made prior to treating the whole field.
5. The CLETHODIM 2 EC rate should be 6 to 8 fl. oz./A for annual grass control in baby mint, minimum of 8 fl. oz./A for annual grass control in established mint and 8 to 16 fl. oz./A for perennial grass control. Crop oil concentrate should be added at the rate of 1.0 to 2.0 pts./A.
6. Insecticide tank mix use with OARTHENE 90 S in soybean is permitted only in a state having an approved Section 24(c) registration for ORTHENE 90 S use in soybean.
7. The CLETHODIM 2 EC rate should be 6 to 8 fl. oz./A for annual grass control in seedling alfalfa.
8. For the CLETHODIM 2 EC plus LORSBAN tank mix, reduce the adjuvant rate down to 1 pt./A when the LORSBAN rate is 1 pt./A or higher.

Table 17. USE DIRECTIONS 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 Rate fl. oz./A | Glyphosate* rate for formulations with built in adjuvant | Adjuvant |
|--|-------------------------------|--|---|
| <12 | 4 | 1.0 to 2.0 lbs. ai/A (Approximately equivalent to 22 to 44 fl. oz./A of ROUNDUP Weather MAX) | Non-ionic surfactant at 0.125 to 0.25% v/v plus ammonium sulfate at 8.5 to 17 lbs. per 100 gals. of carrier |
| 12 to 18 | 5 | | |
| 18 to 24 | 6 | | |

* Glyphosate formulation must be labeled for use on Roundup Ready soybean.

| Roundup Ready Volunteer Corn Height (inches) | CLETHODIM 2 EC Rate fl. oz./A | Glyphosate* rate for formulations without built in adjuvant | Adjuvant |
|--|-------------------------------|---|--|
| <12 | 4 | 1.0 to 2.0 lbs. ai/A (Approximately equivalent to 32 to 64 fl. oz./A of ROUNDUP Original) | Crop oil concentrate at 1 pt./A plus ammonium sulfate at 8.5 to 17 lbs. per 100 gals. of carrier |
| 12 to 18 | 5 | | |
| 18 to 24 | 6 | | |

* 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 labelled 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, as specified in the respective size and rate tables.
- Do not tank mix CLETHODIM 2 EC when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.
- This tank mix may be applied postemergence to ROUNDUP READY soybean up through the full flowering stage. Do not apply less than 60 days before harvest.
- 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.
- Do not allow the CLETHODIM 2 EC 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 such as combinations of spray pressure and nozzle type that will result in fine particles (mist) that are likely to drift.

FALLOW LAND

DIRECTIONS FOR USE

CLETHODIM 2 EC may be used to control annual and perennial grasses in land that was left fallow the previous year and other non-producing agricultural areas. Apply CLETHODIM 2 EC at 6 to 8 fl. oz./A for annual grasses and 8 to 16 fl. oz./A for perennial grasses. When both grass and broadleaf weeds are the target pest, CLETHODIM 2 EC may be tank mixed with 2,4-D ester or BANVEL® SGF for broad spectrum control. When both annual and perennial grasses occur in the same field, use a minimum of 8 fl. oz./A CLETHODIM 2 EC rate.

APPLICATION INFORMATION:

- Use a minimum spray volume of 5 gals./A for aerial applications and 15 gals./A for ground applications.
- Apply only to actively growing grasses when the first grass reaches the labelled weed height as specified by the Use directions for Annual and Perennial Grasses section of this label.
- Annual grasses that emerge after the CLETHODIM 2 EC 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.
- 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 seed heads or exceeded labelled 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 application.

TABLE 18. CLETHODIM 2 EC IN TANK MIXES TO CONTROL ANNUAL AND PERENNIAL GRASSES IN FALLOW LAND

| PRODUCT MIXTURES | APPLICATION RATES/ACRE ¹ | | CROP OIL CONCENTRATE ² v/v | |
|--|--|-------------------|---------------------------------------|-----|
| | ANNUAL GRASSES | PERENNIAL GRASSES | GROUND | AIR |
| CLETHODIM 2 EC + 2,4-D ester or BANVEL SGF | 6 to 8 fl. oz. + 0.5 lb./A or See BANVEL SGF label for rates | 8 to 16 fl. oz. | 1% | 1% |

NOTES:

- Refer to CLETHODIM 2 EC label for weed height and species control. Review BANVEL SGF and 2,4-D labels for crop restrictions, use rates and weeds controlled.
- 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.

USE DIRECTIONS FOR GRASS SUPPRESSION IN NON-CROP AREAS WITH CLETHODIM 2 EC

| 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 | 16 |
| Do not apply as part of a tank mix when applying CLETHODIM 2 EC for grass suppression. | | | |
| Add a crop oil concentrate at 1 qt./A by ground to the finished spray volume. | | | |

TABLE 19. CLETHODIM 2 EC FOR THE CONTROL AND/OR SUPPRESSION OF TALL FESCUE IN NATIVE PRAIRIE WARM-SEASON GRASS RESTORATION PROJECTS

| PRODUCT | RATE | GRASS WEEDS CONTROLLED/SUPPRESSED | | WEED STAGE |
|--|--------------------|-----------------------------------|----------------------------|---|
| | | Common Name | Scientific Name | |
| CLETHODIM 2 EC | 10 to 12 fl. oz./A | Tall Fescue | <i>Festuca arundinacea</i> | 4 to 6 inches tall (40 to 60% green-up) |
| Adjuvant: CLETHODIM 2 EC must be applied with crop oil concentrate at 1 qt./A, plus a spray grade ammonium sulfate at 2.5 to 4 lbs./A. Mixing Order: Thoroughly mix spray grade ammonium sulfate in water, add CLETHODIM 2 EC, then add crop oil concentrate. | | | | |

SPECIAL APPLICATION INSTRUCTIONS/PRECAUTIONS

Burn or mow fields a minimum of 3 weeks prior to application to remove excess crop residue. Apply in the spring, at 40 to 60% tall fescue green-up, prior to emergence of

warm-season grasses. Do not mow area for 2 weeks after the CLETHODIM 2 EC application.

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

Apply only to fields that have warm-season grasses established for 2 years. Applications of CLETHODIM 2 EC to emerged warm-season grasses may cause injury. Do not apply to warm-season grasses grown for seed.

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

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

TABLE 20. CLETHODIM 2 EC FOR THE SUPPRESSION OF TALL FESCUE SEED HEADS IN NONPRODUCING AGRICULTURAL AREAS

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

SPECIAL APPLICATION INSTRUCTIONS/PRECAUTIONS

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

Use the higher CLETHODIM 2 EC rate if less tall fescue green matter is present.

Do not mow area for two weeks after the CLETHODIM 2 EC application.

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

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

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

DIRECTIONS FOR USE IN ORNAMENTALS

For ornamental plant uses, CLETHODIM 2 EC can be used to control labeled grass weeds in greenhouses, lathhouses, shadehouses, and around outdoor ornamentals, including nurseries, parks, roadside plantings, and structure landscapes.

IMPORTANT

CLETHODIM 2 EC successfully controls weeds in newly transplanted and established non-grassy ornamentals. Plant tolerance to CLETHODIM 2 EC 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, the user must 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 have investigated the safety factor to ornamental plants not listed on the label.

The following plants have shown a tolerance for CLETHODIM 2 EC applications:

ORNAMENTAL TREES

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

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

SHRUBS

| COMMON NAME | SCIENTIFIC NAME |
|---------------|----------------------------|
| Abelia | <i>Abelia spp.</i> |
| Anise, Purple | <i>Illicium floridanum</i> |
| Aucuba | <i>Aucuba spp.</i> |
| Azalea* | <i>Rhododendron spp.</i> |

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

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

USE DIRECTIONS FOR ANNUAL GRASSES IN ORNAMENTALS

- Apply only to actively growing grasses at labelled weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the labelled growth stage 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 | <i>Echinochloa crus-galli</i> | 2 to 8 | 8 | 16 |

| | | | | |
|------------------------|---------------------------------|----------|---|----|
| Broadleaf Signalgrass | <i>Brachiaria platyphylla</i> | 2 to 6 | 8 | 16 |
| Brome | | | | |
| California | <i>Bromus carinatus</i> | 2 to 6 | 8 | 16 |
| Cheat | <i>Bromus secalinus</i> | 2 to 6 | 8 | 16 |
| Downy | <i>Bromus tectarum</i> | 2 to 6 | 8 | 16 |
| Ripgut | <i>Bromus diandrus</i> | 2 to 6 | 8 | 16 |
| Canarygrass | <i>Phalaris canariensis</i> | 1 to 4 | 8 | 16 |
| Crabgrass | | | | |
| Hairy | <i>Digitaria adscendens</i> | 2 to 6** | 8 | 16 |
| Large | <i>Digitaria sanguinalis</i> | 2 to 6** | 8 | 16 |
| Smooth | <i>Digitaria ischaemum</i> | 2 to 6** | 8 | 16 |
| Southern | <i>Digitaria ciliaris</i> | 2 to 6** | 8 | 16 |
| Crowfootgrass | <i>Dactyloctenium aegyptium</i> | 2 to 6** | 8 | 16 |
| Fall Panicum | <i>Panicum dichotomiflorum</i> | 2 to 8 | 8 | 16 |
| Field Sandbur | <i>Cenchrus incertus</i> | 2 to 6 | 8 | 16 |
| Foxtail | | | | |
| Giant | <i>Setaria faberi</i> | 2 to 12 | 8 | 16 |
| Green | <i>Setaria viridis</i> | 2 to 8 | 8 | 16 |
| Yellow | <i>Setaria glauca</i> | 2 to 8 | 8 | 16 |
| Goosegrass | <i>Eleusine indica</i> | 2 to 6** | 8 | 16 |
| Itchgrass | <i>Rottboellia cochlin</i> | 2 to 6 | 8 | 16 |
| Junglerice | <i>Echinochloa colona</i> | 2 to 6 | 8 | 16 |
| Lovegrass (Stinkgrass) | <i>Eragrostis cilianensis</i> | 2 to 6 | 8 | 16 |
| Rabbitsfootgrass | <i>Polypogon monspeliensis</i> | 1 to 4 | 8 | 16 |
| Red Rice | <i>Oryza sativa</i> | 1 to 3 | 8 | 16 |
| Ryegrass | | | | |
| Hardy | <i>Lolium remotum</i> | 2 to 6 | 8 | 16 |
| Italian | <i>Lolium multiflorum</i> | 2 to 6 | 8 | 16 |
| Seedling Johnsongrass | <i>Sorghum halepense</i> | 4 to 10 | 8 | 16 |
| Shattercane | <i>Sorghum bicolor</i> | 6 to 18 | 8 | 16 |
| Southwestern Cupgrass | <i>Eriochloa gracilis</i> | 2 to 6 | 8 | 16 |
| Sprangletop | | | | |
| Amazon | <i>Leptochloa panicoides</i> | 2 to 6 | 8 | 16 |
| Bearded | <i>Leptochloa fascicularis</i> | 2 to 6 | 8 | 16 |
| Mexican | <i>Leptochloa uninervia</i> | 2 to 6 | 8 | 16 |
| Red | <i>Leptochloa filiformis</i> | 2 to 6 | 8 | 16 |
| Texas Panicum | <i>Panicum texanum</i> | 2 to 6 | 8 | 16 |
| Volunteer Cereals | | | | |
| Barley | <i>Hordeum vulgare</i> | 2 to 6 | 8 | 16 |
| Oats | <i>Avena sativa</i> | 2 to 6 | 8 | 16 |
| Rye | <i>Secale cereale</i> | 2 to 6 | 8 | 16 |
| Wheat | <i>Triticum aestivum</i> | 2 to 6 | 8 | 16 |
| Volunteer Corn | <i>Zea mays</i> | 4 to 12 | 6 | 8 |

| | | | | |
|---|--------------------------|----------|---|----|
| Volunteer Corn | <i>Zea mays</i> | 12 to 24 | 8 | 16 |
| Volunteer Grain Sorghum | <i>Sorghum bicolor</i> | 8 to 12 | 8 | 16 |
| Wild Oats | <i>Avena fatua</i> | 2 to 6 | 8 | 16 |
| Wild Proso Millet | <i>Panicum miliaceum</i> | 2 to 10 | 8 | 16 |
| Witchgrass | <i>Panicum capillare</i> | 2 to 8 | 8 | 16 |
| Woolly Cupgrass | <i>Eriochla villosa</i> | 2 to 8 | 8 | 16 |
| Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v). | | | | |

* Generally occurs between 3-leaf stage and tillering.

** Length of lateral growth.

NOTES:

1. 8 fl. oz./A = approximately 0.2 fl. oz./1000 sq. ft.
2. 16 fl. oz./A = approximately 0.4 fl. oz./1000 sq. ft.

USE DIRECTIONS FOR ANNUAL BLUEGRASS CONTROL WITH CLETHODIM 2 EC IN ORNAMENTALS

| GRASS SPECIES | WEED STAGE | RATE FL. OZ./ ACRE | HIGH RATE |
|--|------------|-----------------------|--------------|
| Annual Bluegrass (<i>Poa annual</i>) | to 4-leaf | 6 | 16 |

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).

USE DIRECTIONS FOR PERENNIAL GRASSES

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

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

NOTES:

1. 8 fl. oz./A = approximately 0.2 fl. oz./1000 sq. ft.
2. 16 fl. oz./A = approximately 0.4 fl. oz./1000 sq. ft.

STORAGE AND DISPOSAL

PROHIBITIONS

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 1-800-424-9300, day or night.

PESTICIDE DISPOSAL

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

CONTAINER HANDLING

Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

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

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.**