



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

February 7, 2020

Robert Avalos
Manager of Registrations
Loveland Products Inc.
P.O. Box 1286
Greeley, CO 80632-1286

Subject: Registration Review Label Mitigation for Clethodim
Product Name: LPI Clethodim
EPA Registration Number: 34704-954
Application Dates: 03/14/2018
Decision Numbers: 559265

Dear Mr. Avalos:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with Clethodim Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

Page 2 of 2
EPA Reg. No. 34704-954
Decision No. 559265

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

Sincerely,

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

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

Enclosure



LPI CLETHODIM

ACTIVE INGREDIENT	% BY WT.
Clethodim: (E)-2-[1-[(3-chloro-2-propenyl)oxy]imino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one.....	26.4%
OTHER INGREDIENTS:	73.6%
TOTAL.....	100.0%

Contains petroleum distillate.
Contains 2.0 lbs. clethodim per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID

If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.

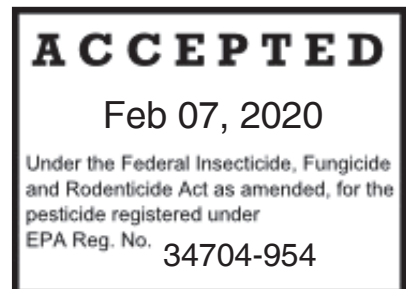
Have the product container or label with you when calling a poison control center or doctor or going for treatment.

NOTE TO PHYSICIAN: Ingestion of this product or subsequent vomiting can result in aspiration of light hydro- carbon liquid, which can cause pneumonitis. Contains petroleum distillate

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-844-966-8565.

EPA Reg. No. 34704-954
EPA Est. No.
Net Contents: GAL (L)
[EXP 3/18 Print Code to be placed here]

FORMULATED FOR:
LOVELAND PRODUCTS, INC.
P.O. BOX 1286
GREELEY, COLORADO 80632-1286



**LPI CLETHODIM
EPA REG. NO. 34704-954**

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

Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes, skin or clothing.

Personal Protective Equipment (PPE)

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

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Chemical-resistant gloves, such as barrier laminate or viton \geq 14 mils,
- Protective eyewear, and
- Shoes plus socks.

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

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands 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

NON-TARGET ORGANISM ADVISORY STATEMENT

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

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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

LPI CLETHODIM
EPA REG. NO. 34704-954

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 ≥14 mils,
- Protective eyewear, and
- Shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep 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

Notice: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the labels shall be the exclusive risk of user, applicator, and/or application advisor. Read and follow the entire label of each product to be used in the tank mix with this product.

PRODUCT INFORMATION

For use on:

Alfalfa, Asparagus, Beans and Peas (dry shelled)¹, Beans and Peas (succulent)², Broccoli, Cabbage, Canola*, Carrots, Cauliflower (and Other Head and Stem Brassica Vegetables)³, Celery, Clover (grown in Idaho, Oregon, and Washington only), Conifers, Cotton, Cranberries, Cucumber, Eggplant (and Other Fruiting Vegetables)⁴, Fallow Land (and Other Non-Producing Agricultural Areas), Flax*, Garden Beets, 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, and Non-Crop or Non-Planted Areas, Onions (dry bulbs and green), Ornamentals, Peanuts (including perennial)*, Peppers (bell and non-bell), Potatoes, Radishes, Rhubarb (and Other Leaf Petioles)¹¹, Safflower, Sesame, Shallots (dry bulbs and green), Squash (including Pumpkins)⁹, Soybeans, Strawberries, Sugarbeets, Sunflowers, Sweet Potatoes, Tomatoes and Yams (and Other Tuberous and Corm Vegetables)¹²

*** Not for use in California unless accompanied by supplemental labeling allowing use in California.**

1. Other Dry Shelled Bean and Pea Crops approved for use with this product include: Beans

LPI CLETHODIM
EPA REG. NO. 34704-954

(*Lupinus* spp.), grain, sweet, white and white sweet; Beans (*Phaseolus* spp.), field, kidney, lima (dry), navy, pinto and tepary; Beans (*Vigna* spp.), adzuki beans, black-eyed peas, catjang, cowpeas, crowder peas, moth beans, mung beans, rice beans, Southern peas, urd beans, broad (dry), chickpeas (garbanzo), guar, lablab beans and lentils; Peas (*Pisum* spp.), field and pigeon.

2. Other Succulent Bean and Pea Crops approved for use with this product include: Beans (*Lupinus* spp.), grain, sweet, white and white sweet; Beans (*Phaseolus* spp.), field, kidney, lima (dry), navy, pinto and tepary; Beans (*Vigna* spp.), adzuki beans, black-eyed peas, catjang, cowpeas, crowder peas, moth beans, mung beans, rice beans, Southern peas, urd beans, broad (dry), chickpeas (garbanzo), guar, lablab beans and lentils; Peas (*Pisum* spp.), field and pigeon.
3. Other Head and Stem Brassica Vegetables approved for use with this product include: Chinese broccoli; Brussels sprouts; Chinese (Napa) cabbage; Chinese mustard; cavalo broccolo; and kohlrabi.
4. Other Fruiting Vegetables (except Tomatoes) approved for use with this product include: eggplant, groundcherry, pepino, peppers (all) and tomatillo.
5. Other Herb Crops approved for use with this product include: angelica, balm, basil, borage, burnet, chamomile, catnip, chervil (dried), chive, Chinese chive, clary, coriander (leaf), costmary, culantro (leaf), curry (leaf), dill (dillweed), horehound, hyssop, lavender, lavage (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 this product include: burdock, edible; celeriac; chervil, turnip-rooted; chicory; ginseng; parsley, turnip-rooted; parsnip; radishes, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret, and turnips.
7. Other Edible-Podded Legume Vegetable Crops approved for use with this product include: Beans (*Phaseolus* spp.), runner, snap and wax; Beans (*Vigna* spp.), asparagus, Chinese longbeans, moth, yardlong, and jackbeans; Peas (*Pisum* spp.), dwarf, edible-pod, snow, sugar snap, pigeon and sword beans.
8. Other Leafy Greens Crops approved for use with this product include: amaranth (Chinese spinach, leafy amaranth and tampala), arugula (rocket), 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 this product include: chayote (fruit), Chinese wax gourds, citron melons, edible gourds, Gherkin and muskmelons (all) including honeydew melons.
10. Other Leafy Brassica Greens approved for use with this product 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 this product include: cardoon, celtuce, Chinese celery, Florence fennel, and Swiss chard.
12. Other Tuberos and Corm Vegetables approved for use with this product 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.

This product is not for use on vegetable crops being grown for seed production unless specific use directions are provided.

This product is a selective post-emergence herbicide for control of annual and perennial grasses. This product does not control sedges or broadleaf weeds. Repeated use of this product (or similar post-emergence grass herbicides with the same mode of action) may lead to

LPI CLETHODIM
EPA REG. NO. 34704-954

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 this product 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.

When an adjuvant is to be used with this product, Loveland Products, Inc. suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

APPLICATION INFORMATION

Timing of Applications

Apply this product post-emergence to actively growing grasses according to rate tables on this label. Applications made to grass plants stressed by insufficient moisture or hot or cold temperatures or to grass plants exceeding indicated growth stages may result in unsatisfactory control. Do not apply under these conditions.

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

ADDITION OF ADJUVANT OR CROP OIL CONCENTRATE

CROP	ADJUVANT
Alfalfa, Cotton, Dry Shelled Beans and Peas, Edible-Podded Legume Vegetables, Peanuts (including perennial), Potatoes, Soybeans, Succulent Beans and Peas, Sugar Beets, Sunflowers	Always use a crop oil concentrate* at 1 qt./A by ground or 1% v/v (but not less than 1 pt./A) in 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 applications of this product in addition to the labeled 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.

LPI CLETHODIM
EPA REG. NO. 34704-954

Asparagus, Canola, Carrots, Clover, Cranberries, Cucurbits, Flax, Fruiting Vegetables (except Tomatoes), Garden Beets, Garlic, Head and Stem Brassica Vegetables, Herbs, Hops, Leaf Petioles, Leafy Brassica Greens, Leafy Greens, Mint, Mustard Seed, Onions (Dry Bulbs and Green), Root Vegetables, Safflower, Sesame, Shallots (Dry Bulbs and Green), Strawberries, Sweet Potatoes (Yams and Other Tuberous and Corm Vegetables, except Potatoes)	Always use a crop oil concentrate at 1% v/v in the finished spray volume unless tank mix instructions indicate otherwise. Addition of liquid fertilizer is not advised for these crops.
--	---

Ornamental Plants, Non-Bearing Food Crops	Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v). Use of crop oil concentrate is not advised since it may injure flowers and foliage.
---	---

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

*Acceptable crop oil concentrates would be those 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.

Ground Application

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

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

Air Application

Use a minimum of 3 gals. of spray solution per acre unless otherwise directed in this label. Increase spray volumes up to 10 gals. as grass or crop foliage becomes dense.

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

Note: Crop injury may occur when this product is applied to onions, garlic or shallots with aerial equipment.

Spot Treatment

LPI CLETHODIM
EPA REG. NO. 34704-954

When using hand sprayers or high volume sprayers utilizing handguns, mix 0.25% to 0.50% (0.33 oz. to 0.65 oz./gal.) of this product 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./gal.) by volume. For uses requiring non-ionic surfactant, include non-ionic surfactant at 0.25% (0.33 oz./gal.) by volume.

Note: If this product is applied as a spot treatment, do not exceed the maximum rate allowed on a "per acre" basis or crop injury may occur.

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

DO NOT APPLY this product by chemigation in the states of Idaho, Montana, Oregon and Washington.

This product may be applied to onions and garlic by sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, travelers, big gun, solid set, or hand move. Do not apply by chemigation to any other crop or to this crop using any other type of irrigation system.

Apply this product at the high rate indicated for annual grasses (16 fl. oz./A; 0.25 lb. ai/A) 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 qt./A.

Apply this product 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 labeled 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 this product 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.

The use precautions below must be followed when applying this product through an irrigation system connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Use Precautions

1. Apply this product only through irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, travelers, big gun, solid set, or hand move. Do not apply this product through any other type of irrigation system.
2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from non-uniform distribution of treated water.
3. If you have any questions about calibration, contact a State Extension Service specialist, an equipment manufacturer, 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

LPI CLETHODIM
EPA REG. NO. 34704-954

under supervision of the responsible person shall shut the system down and make necessary adjustments if the need arises.

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 also 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.

APPLICATION RESTRICTIONS

Do not apply if rain is expected within 1 hour of application as control may be unsatisfactory.

Do not apply a post-emergence broadleaf herbicide within one day following application of this product or reduced grass control may result.

This product is not labeled for use on vegetable crops being grown for seed production unless specific use directions are provided.

Aerial applications for all tree fruits and tree nuts uses are prohibited.

Do not apply more than 66.56 fl. oz./A (1.04 lbs. a.i./A) per year to the following crops:

fallow land, rights-of-way, around airports, electric utilities, commercial buildings, manufacturing plants, storage yards, rail yards, fence lines, parkways, uncultivated areas, beneath greenhouse benches, alfalfa, ornamentals, landscaped areas, non-bearing food crops (apples, berries, strawberries, citrus fruits, grapes, olives, pears, stone fruits, and tree nuts), clover, mint, beets, brassica vegetables, carrots, cranberries, cucurbit vegetables, fruiting vegetables, leafy vegetables, strawberries, dried beans, cotton, peanuts, potatoes, sainfoin, soybeans, sugar beets, sunflowers, sweet potatoes, tomatoes, trefoil, yams, Christmas trees, forest trees, tree fruits, tree nuts.

Do not apply more than 4 applications per year for the following uses:

fallow land, rights-of-way, around airports, electric utilities, commercial buildings, manufacturing plants, storage yards, rail yards, fence lines, parkways, uncultivated areas, beneath greenhouse benches, alfalfa, ornamentals, landscaped areas, non-bearing food crops (apples, berries, strawberries, citrus fruits, grapes, olives, pears, stone fruits, and tree nuts), grass forage/fodder/hay, clover, herbs, turnip greens, sesame, safflower, hops, mustard vegetables, radishes, mint, beets, brassica vegetables, carrots, cranberries, cucurbit vegetables, fruiting vegetables, leafy vegetables, strawberries, dried beans, cotton, peanuts, potatoes, sainfoin, soybeans, sugar beets, sunflowers, sweet potatoes, tomatoes, trefoil, yams, root & tuber vegetables, Christmas trees, forest trees, lentils, tree fruits and tree nuts, asparagus, sage, shallots, artichokes, bushberries, including cranberries, baneberries, peaches, seeds.

LPI CLETHODIM
EPA REG. NO. 34704-954

For canola, do not apply more than 6 fl. oz. (0.094 lb. ai) of this product per acre per year. For clover, flax, mustard seed and radish crops, do not apply more than 16 fl. oz. (0.25 lb. ai) of this product per acre per year. For all other crops, do not apply more than 32 fl. oz. (0.50 lb. ai) of this product per acre per year (except where state-specific restrictions are noted).

Application on Long Island, New York is restricted to no more than 16 fl. oz. (0.25 lb. ai) per of this product acre per year.

Do not apply more than 8 fl. oz./A (0.125 lb. ai) of this product per application to the following crops: asparagus, brassica vegetables (head and stem), beans (succulent), carrots, cranberries, cucurbits, flax, fruiting vegetables (except tomatoes), garden beets, green onions, herbs, hops, leafy petioles, leafy brassica greens, leafy greens, legume vegetables (edible-podded), non-bearing food crops, peas (dry shelled), peas (succulent), root vegetables, safflower, sesame, and strawberries.

Do not apply more than 6 fl. oz./A (0.094 lb. ai) of this product per application to canola or mustard seed.

For all other crops, do not apply more than 16 fl. oz. (0.25 lb ai per acre) of this product per application (except where state-specific restrictions are noted).

Exceeding these rates may result in unacceptable crop injury.

Do not apply under conditions of stress. Applying this product 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 this product effectively and will be less susceptible to herbicide activity.

Best perennial grass control can be obtained if rhizomes or stolons are cut up by pre-plant 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, results in a very staggered, non-uniform weed emergence. Due to this non-uniform weed emergence, use no fewer than two applications of this product per year at the appropriate weed-growth stage rate under continuous no-till conditions.

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

While all the vegetable crops on this label have been tested and are not sensitive to this product, not all specialty varieties of these crops have been tested. It is advised that, before applying this product to specialty varieties of vegetable crops on this label, crop sensitivity 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 this product and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs, an additional application of this product may be necessary.

SPRAY DRIFT

Aerial Applications:

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.

LPI CLETHODIM
EPA REG. NO. 34704-954

- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Ground Boom Applications:

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

SPRAY DRIFT ADVISORIES

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

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size - Ground Boom

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

Controlling Droplet Size - Aircraft

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

BOOM HEIGHT - Ground Boom

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

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

LPI CLETHODIM
EPA REG. NO. 34704-954

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

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

WIND

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

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

WEED RESISTANCE MANAGEMENT

For resistance management, LPI Clethodim is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to LPI Clethodim and other Group 1 herbicides. Weed species with acquired resistance to Group 1 herbicides may eventually dominate the weed population if Group 1 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by LPI Clethodim or other Group 1 herbicides. Users should scout before and after application.

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

To delay herbicide resistance:

- Avoid the consecutive use of LPI Clethodim or other target site of action Group 1 herbicides that might have a similar target site of action, on the same weed species.
- Use tank mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action and are both effective at the tank mix or prepack rate on the weed(s) of concern (an herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides)
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Scout fields prior to application to identify the weed species present and their growth state to determine if the intended application will be effective.
- Scout fields after application to verify that the treatment was effective.

LPI CLETHODIM
EPA REG. NO. 34704-954

- Contact your local extension specialist, certified crop advisors and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

Report any incidence of non-performance of this product against a particular weed species to your Loveland Products, Inc. retailer, representative or call 1-888-574-2878. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemicals means to remove escapes, as practical, with the goal of preventing further seed production.

CROP-SPECIFIC INSTRUCTIONS, RESTRICTIONS AND LIMITATIONS FOR LPI CLETHODIM

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
Alfalfa <i>including:</i> Sainfoin, Holy Clover, ³ Birdsfoot Trefoil ³	6-16 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 partners for feeding, grazing, and harvesting restrictions. ^{5,6} The addition of AMS has shown improved grass control for difficult-to-control species including quackgrass, rhizome johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn. Restrictions: The Preharvest Interval (PHI) is 15 days before grazing, feeding, or harvesting (cutting) for forage or hay. Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application. Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year. Do not apply more than 4 applications per year.
Asparagus	6-8 fl. oz.	1% v/v in the finished spray volume	Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application. Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year. Do not apply more than 4 applications per year. For repeat applications; make on a minimum of a 14-day interval. In California: Do not apply more

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
			than 32 fl. oz. per acre (0.5 lb. ai/A) per year.
			The Preharvest Interval (PHI) is 1 day.
Beans, Dry Shelled <i>Including:</i> Beans (<i>Lupinus</i> spp.) Grain, Sweet, White, White Sweet Beans (<i>Phaseolus</i> spp.) Field, Kidney, Lima (dry), Navy, Pinto, Tepary Beans (<i>Vigna</i> spp.) Adzuki Beans, Blackeyed Peas, Catjang, Cowpeas, Crowder Peas, Moth Beans, Mung Beans, Rice Beans, Southern Peas, Urd Beans, Broad (dry), Chickpeas (garbanzo), Guar, Lablab Beans, Lentils	6-16 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 directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult-to-control species including quackgrass, rhizome johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn. Restrictions: Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application. Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year. Do not apply more than 4 applications per year. For repeat application, make on a minimum of a 14-day interval. The Preharvest Interval (PHI) is 30 days.
Beans, Succulent <i>Including:</i> Beans (<i>Phaseolus</i> spp.) Broad Beans (succulent), Lima Beans (green) Beans (<i>Vigna</i> spp.) Blackeyed Peas, Cowpeas, Southern Peas	6-8 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 directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult-to-control species including quackgrass, rhizome johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn. Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application. Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per year. Do not apply more than one (1)

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
			<p>application per year.</p> <p>The Preharvest Interval (PHI) is 21 days</p>
Beets, Garden	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 30 days</p>
<p>Canola* *Not for use in California unless accompanied by supplemental labeling allowing use in California</p>	4-6 fl. oz.	1% v/v in the finished spray volume	<p>Crop injury may occur when this product is applied during the bloom period.</p> <p>Restrictions: Do not apply more than 6 fl. oz. (0.094 lb. ai) per acre per application.</p> <p>Do not apply more than 6 fl. oz. (0.094 lb. ai) per acre per year.</p> <p>Do not apply more than 1 application per year.</p> <p>The Preharvest Interval (PHI) is 70 days.</p> <p>Do not apply after crop has begun bolting.</p>
Carrots	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is</p>

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
			30 days.
Clover (Idaho, Oregon, and Washington only)	6-16 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions: Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.</p> <p>Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per year.</p> <p>Do not apply more than 2 applications per year.</p> <p>For use on clover grown in the states of Idaho, Oregon, and Washington only.</p> <p>The Preharvest Interval (PHI) is 15 days before grazing, feeding, or harvesting (cutting) for forage or hay.</p>
Cotton	6-16 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air ⁵	<p>The addition of AMS has shown improved grass control for difficult-to-control species including quackgrass, rhizome johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Restrictions: Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>The Preharvest Interval (PHI) is 60 days.</p> <p>Do not graze treated fields or feed treated forage or hay to livestock.</p>
Cranberries	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p>

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
			<p>For repeat applications, make on a minimum of a 14-day interval. Do not apply between the "hook" stage and full fruit set.</p> <p>The Preharvest Interval (PHI) is 30 days.</p>
<p>Cucurbits <i>Including:</i> Chayote (fruit), Chinese Wax Gourds, Citron Melons, Cucumbers, Gherkin, Gourds (edible), Muskmelons (all) including: Cantaloupes, Honeydew Melons, Pumpkins, Squash (all), Watermelons</p>	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 14 days.</p>
<p>Fallow Land, Conifer Trees (and Other Non-Producing Agricultural Areas) Non-Crop or Non-Planted Areas</p>	6-16 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	<p>Restrictions: Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>Do not plant any crop for 30 days after application unless this product is registered for use in that crop.</p>
<p>Flax* * Not for use in California unless accompanied by supplemental labeling allowing use in California.</p>	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Apply prior to bloom. Crop injury may occur when this product is applied during the bloom period.</p> <p>Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per year.</p> <p>Do not apply more than 2 applications per year.</p> <p>The Preharvest Interval (PHI) is</p>

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
60 days.			
Fruiting Vegetables (except Tomatoes) <i>Including:</i> Eggplant, Groundcherry, Pepino, Peppers (all), Tomatillo	6-8 fl. oz.	1% v/v in the finished spray volume	Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application. Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year. Do not apply more than 4 applications per year. For repeat applications, make on a minimum of a 14-day interval. The Preharvest Interval (PHI) is 20 days.
Head and Stem Brassica Vegetables <i>Including:</i> Broccoli, Cabbage, Cauliflower, Brussels sprouts	6-8 fl. oz.	1% v/v in the finished spray volume	Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application. Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year. Do not apply more than 4 applications per year. For repeat applications, make on a minimum of a 14-day interval. The Preharvest Interval (PHI) is 30 days.
Herbs <i>Including:</i> Angelica, Balm, Basil, Borage, Burnet, Chamomile, Catnip, Chervil (dried), Chive, Chive (Chinese), Clary, Coriander (leaf), Costmary, Culantro (leaf), Curry (leaf), Dill (dillweed), Horehound, Hyssop, Lavender, Lovage (leaf), Marigold, Marjaram (<i>Origanum</i> spp.), Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory	6-8 fl. oz.	1% v/v in the finished spray volume	This product has not been tested on all herbs and herb varieties. It is the responsibility of the user to test this product on a small portion of the crop to be treated before treating the entire field. Verify crop sensitivity to this product on a small area of the herb crop at the desired application 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, this product may be used on the entire field at the rate tested and with the same crop oil used in the sensitivity test. Restrictions: Do not apply more than 8 fl. oz.

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
(Summer and Winter)			<p>(0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 14 days.</p>
Hops	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions:</p> <p>Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 21 days.</p>
<p>Leaf Petioles <i>Including:</i> Cardoon, Celery, Celtuce, Chinese Celery, Fennel, Florence (finochio), Rhubarb, Swiss Chard</p>	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions:</p> <p>Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 30 days.</p>
<p>Leafy Greens <i>Including:</i> Amaranth: Chinese Spinach, Leafy Amaranth, Tampala; Arugula (roquette); Chervil; Chrysanthemum (edible-leaved);</p>	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions:</p> <p>Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p>

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
Chrysanthemum, Garland; Corn Salad; Cress: Garden, Upland (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, Vine (Indian and malabar)			Do not apply more than 4 applications per year. For repeat applications, make on a minimum of a 14-day interval. The Preharvest Interval (PHI) is 14 days.
Legume Vegetables, Edible- Podded <i>Including:</i> Beans (<i>Phaseolus</i> spp.): Runner, Snap, Wax Beans (<i>Vigna</i> spp.): Asparagus, Chinese Longbean, Moth, Yardlong, Jackbean Peas (<i>Pisum</i> spp.): Dwarf, Edible-Pod, Snow, Sugar Snap, Pigeon, Sword Bean	6-8 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 directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult-to-control species including quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn. Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application. Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per year. Do not apply more than 1 application per year. For peas, apply before bloom, but no later than 21 days before harvest. The Preharvest Interval (PHI) is 21 days.
Mint	6-16 fl. oz. ⁴	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air ⁵	Restrictions: Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application. Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year. Do not apply more than 4

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
			<p>applications per year.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 21 days.</p>
<p>Mustard Seed* *Not for use in California unless accompanied by supplemental labeling allowing use in California.</p>	4-6 fl. oz.	1% v/v in the finished spray volume	<p>Crop injury may occur when this product is applied during the bloom period.</p> <p>Restrictions: Do not apply more than 6 fl. oz. (0.094 lb. ai) per acre per application.</p> <p>Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per year.</p> <p>Do not apply more than 2 applications per year.</p> <p>Do not apply after crop has begun bolting.</p> <p>The Preharvest Interval (PHI) is 75 days.</p>
<p>Onions (dry bulbs only) Garlic Shallots (dry bulbs only)</p>	6-16 fl. oz. ^{7,8}	1% v/v in the finished spray volume	<p>Restrictions: For onions, do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.</p> <p>For garlic, shallots and air applications to onions, do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>For garlic, shallots and air applications to onions, do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>For garlic, shallots and air applications to onions in California, do not apply more than 2 applications per year.</p> <p>Minimum of 20 gals./A spray volume by ground in entire U.S. Minimum of 20 gals./A spray volume by air in California.⁹ In states other than California, air application to onions, garlic or shallots must be made in a minimum of 10 gals./A.</p>

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
			The Preharvest Interval (PHI) is 45 days.
Onions, Green <i>Including:</i> Leeks, Scallions, or Spring Onions, Japanese Bunching Onions, Green Shallots, Green Eschalots	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per year.</p> <p>Do not apply more than 2 applications per year.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 14 days.</p>
Ornamentals	6-16 fl. oz.	Use of crop oil concentrate is not advised since it may injure flowers and foliage. See SPECIAL USE INSTRUCTIONS	<p>Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v).</p> <p>Restrictions: For ornamentals, do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.</p> <p>For non-bearing food crops, do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>Sugar maples cannot be tapped for syrup within one year of application.</p>
Non-Bearing Food Crops	6-8 fl. oz. ⁸		
Peas, Dry Shelled <i>Including:</i> Peas (<i>Pisum</i> spp.) Field, Pigeon	6-8 fl. oz.	1 qt. by ground or 1 % v/v (but not less than 1 pt./A) by air ⁵	<p>Refer to the appropriate table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult-to-control species including quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per</p>

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
			<p>application.</p> <p>Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per year.</p> <p>Do not apply more than 1 application per year.</p> <p>Apply before bloom but not later than 30 days prior to harvest.¹⁰</p> <p>The Preharvest Interval (PHI) is 30 days.</p>
Peas, Succulent <i>Including:</i> Peas (<i>Pisum</i> spp.) English Peas, Garden Peas, Green Peas, Pigeon Peas	6-8 fl. oz.	1 qt. by ground or 1 % v/v (but not less than 1 pt./A) by air ⁵	<p>Refer to the appropriate table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult-to-control species including quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Restrictions:</p> <p>Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per year.</p> <p>Do not apply more than 1 application per year.</p> <p>year. Apply before bloom but not later than 21 days prior to harvest.¹⁰</p> <p>The Preharvest Interval (PHI) is 21 days.</p>
Peanuts (including Perennial)* * Not for use in California unless accompanied by a supplemental label.	6-16 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air ⁵	<p>The addition of AMS has shown improved grass control for difficult-to-control species including quackgrass, rhizome johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Restrictions:</p> <p>Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz.</p>

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
			(0.5 lb. ai) per acre per year. Do not apply more than 4 applications per year. The Preharvest Interval (PHI) is 40 days.
Potatoes	6-16 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. Restrictions: Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application. Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year. Do not apply more than 4 applications per year. The Preharvest Interval (PHI) is 30 days.
Radishes	6-8 fl. oz.	1% v/v in the finished spray volume	Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application. Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per year. Do not apply more than 2 applications per year. For repeat applications, make on a minimum of a 14-day interval. The Preharvest Interval (PHI) is 15 days.
Root Vegetables (except Radishes) <i>Including:</i> Chicory, Ginseng, Horseradish, Turnip	6-8 fl. oz.	1% v/v in the finished spray volume	Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application. Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year. Do not apply more than 4 applications per year.

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
			<p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 30 days.</p>
Safflower	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 70 days.</p>
Sesame	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions: Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>Do not apply during flowering.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 14 days.</p>
Soybeans	6-16 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air ⁵	<p>The addition of AMS has shown improved grass control for difficult-to-control species including quackgrass, rhizome johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Restrictions: Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p>

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
			<p>Do not apply more than 4 applications per year.</p> <p>Do not graze treated fields or feed treated forage or hay to livestock. Refer to appropriate table for reduced rate directions for the control of small annual grasses.</p> <p>The Preharvest Interval (PHI) is 60 days.</p>
Strawberries	6-8 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions:</p> <p>Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 4 days.</p>
Sugar Beets	6-16 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 directions for the control of small annual grasses.</p> <p>The addition of AMS has shown improved grass control for difficult-to-control species including quackgrass, rhizome johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Restrictions:</p> <p>Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>The Preharvest Interval (PHI) is 40 days.</p>
Sunflowers	6-16 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air ⁵	<p>The addition of AMS has shown improved grass control for difficult-to-control species</p>

LPI CLETHODIM
EPA REG. NO. 34704-954

CROPS ¹	USE RATES PER ACRE	CROP OIL CONCENTRATE RATES PER ACRE ²	APPLICATION INSTRUCTIONS
			<p>including quackgrass, rhizome johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Restrictions: Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>The Preharvest Interval (PHI) is 70 days.</p>
<p>Sweet Potatoes, Yams, and Other Tuberous and Corm Vegetables (except Potatoes) <i>Including:</i> Artichoke Chinese, Jerusalem Cassava Bitter, Sweet Ginger</p>	6-16 fl. oz.	1% v/v in the finished spray volume	<p>The addition of AMS has shown improved grass control for difficult-to-control species including quackgrass, rhizome johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.</p> <p>Restrictions: Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>The Preharvest Interval (PHI) is 30 days.</p>
Tomatoes	6-16 fl. oz.	1% v/v in the finished spray volume	<p>Restrictions: Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.</p> <p>Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.</p> <p>Do not apply more than 4 applications per year.</p> <p>For repeat applications, make on a minimum of a 14-day interval.</p> <p>The Preharvest Interval (PHI) is 20 days.</p>

LPI CLETHODIM
EPA REG. NO. 34704-954

- ¹ This product is not intended for use on vegetable crops being grown for seed production unless specific use directions are provided.
- ² Acceptable crop oil concentrates are those which contain a minimum 80% oils and 15% emulsifier. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all the following criteria: be non-phytotoxic, contain only EPA-exempt ingredients, provide good mixing quality, and be successful in local experience. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. See the **Addition of Adjuvant And Crop Oil Concentrate** section for further information.
- ³ This product 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 (0.156 lb.ai/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 applications of this product in addition to the indicated rate of crop oil concentrate.
- ⁶ Do not apply this product and 2,4-DB as a tank mix to alfalfa unless the 60-day feeding, grazing, and harvesting restriction on the 2,4-DB label can be observed.
- ⁷ For ground applications to garlic or shallots, do not exceed 8 fl. oz./A (0.125 lb. ai/A) in a single application. For air applications to onions, garlic, or shallots, do not exceed 8 fl. oz./A (0.125 lb. ai/A) in a single application. For garlic and shallots, do not exceed 2 applications per year. In California for air application to onions, do not exceed 2 applications per year.
- ⁸ If this product is applied as a spot treatment to onions, garlic, shallots, or non-bearing food crops, do not exceed the maximum rate allowed on a PER ACRE basis, or crop injury may occur.
- ⁹ In California, do not apply this product to onions, garlic, or shallots until crop has at least two full leaves. In California, use 14-day spray intervals between the application of this product and Liquid Nitrogen or other herbicide applications. Injury to crop may occur when shorter intervals are observed.
- ¹⁰ Applications of this product to peas during the bloom period could result in severe crop injury including loss of yield and delayed maturity.

Important: Plant sensitivity to this product 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 this product have investigated the safety factor to plants not listed on the label.

NON-BEARING FOOD CROPS

Restrictions:

- Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per application.
- Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.
- Do not apply more than 4 applications per year.
- **DO NOT APPLY THIS PRODUCT 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 this product is improperly applied. Do not apply this product directly over the top of these plant types. Instead, direct spray at the base of the plant where grassy weeds are growing near the ground.

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

LPI CLETHODIM
EPA REG. NO. 34704-954

following application of this product.

<u>Common Name</u>	<u>Scientific Name</u>
Apples	<i>Malus</i> spp.
Berries	<i>Vaccinium</i> spp. <i>Rubus</i> spp.
Cherry, Sweet	<i>Prunus avium</i>
Citrus Fruits	<i>Citrus</i> spp.
Grapes	<i>Vitis</i> spp.
Olives	<i>Olea</i> spp.
Peaches	<i>Prunus persica</i>
Pears	<i>Pyrus communis</i>
Prunes	<i>Prunus</i> spp.
Stone Fruits	<i>Prunus</i> spp.
Strawberries	<i>Fragaria</i> spp.
Tree Nuts:	
Almonds	<i>Prunus triloba</i>
Filbert	<i>Corylus maxima</i>
Pecan	<i>Carya illinoensis</i>
Pistachio	<i>Pistacia vera</i>
Walnut	<i>Juglans</i> spp.

CONIFER TREES

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

<u>Common Name</u>	<u>Scientific Name</u>
Arborvitae, American	<i>Thuja occidentalis</i>
Cedars	<i>Cedrus</i> spp.
Cypress	<i>Taxodium</i> spp.
Douglas Fir	<i>Pseudotsuga menziesii</i>
Firs	<i>Abies</i> spp.
Hemlock, Canadian	<i>Tsuga canadensis</i>
Hemlock, Western	<i>Tsuga heterophylla</i>
Pines	<i>Pinus</i> spp.
Spruces	<i>Picea</i> spp.
Yew	<i>Taxus</i> spp.

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.

Restrictions:

- Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.
- Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.
- Do not apply more than 4 applications per year.

DIRECTIONS FOR CONTROL OF ANNUAL GRASSES

**LPI CLETHODIM
EPA REG. NO. 34704-954**

(EXCEPT IN ESTABLISHED ALFALFA AND MINT)

Restrictions:

-
- Do not exceed the maximum per application rate listed in the table, CROP-SPECIFIC INSTRUCTIONS, RESTRICTIONS AND LIMITATIONS FOR LPI CLETHODIM.
- Do not exceed the maximum yearly rate listed in the table, CROP-SPECIFIC INSTRUCTIONS, RESTRICTIONS AND LIMITATIONS FOR LPI CLETHODIM.
- Do not exceed the maximum number of annual applications listed in the table, CROP-SPECIFIC INSTRUCTIONS, RESTRICTIONS AND LIMITATIONS FOR LPI CLETHODIM.
- Apply only to actively growing grasses at indicated weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the indicated 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 PER ACRE - LOW	RATE PER ACRE - HIGH⁴
Barnyardgrass	<i>Echinochloa crus-galli</i>	2 to 8	6 fl. oz.	8 fl. oz.
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	2 to 6	6 fl. oz.	8 fl. oz.
Brome				
California	<i>Bromus carinatus</i>	2 to 6	6 fl. oz.	8 fl. oz.
Cheatgrass	<i>Bromus secalinus</i>	2 to 6	6 fl. oz.	8 fl. oz.
Downy	<i>Bromus tectorum</i>	2 to 6	6 fl. oz.	8 fl. oz.
Ripgut	<i>Bromus diandrus</i>	2 to 6	6 fl. oz.	8 fl. oz.
Canarygrass	<i>Phalaris canariensis</i>	1 to 4	6 fl. oz.	8 fl. oz.
Crabgrass				
Hairy	<i>Digitaria adscendens</i>	2 to 6**	6 fl. oz.	8 fl. oz.
Large	<i>Digitaria sanguinalis</i>	2 to 6**	6 fl. oz.	8 fl. oz.
Smooth	<i>Digitaria ischaemum</i>	2 to 6**	6 fl. oz.	8 fl. oz.
Southern	<i>Digitaria ciliaris</i>	2 to 6**	6 fl. oz.	8 fl. oz.
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	2 to 6**	6 fl. oz.	8 fl. oz.
Fall Panicum	<i>Panicum dichotomiflorum</i>	2 to 8	6 fl. oz.	8 fl. oz.
Field Sandbur	<i>Cenchrus incertus</i>	2 to 6	6 fl. oz.	8 fl. oz.
Foxtail				
Giant	<i>Setaria faberi</i>	2 to 12	6 fl. oz.	8 fl. oz.
Green	<i>Setaria viridis</i>	2 to 8	6 fl. oz.	8 fl. oz.
Yellow	<i>Setaria glauca</i>	2 to 8	6 fl. oz.	8 fl. oz.
Goosegrass	<i>Eleusine indica</i>	2 to 6**	6 fl. oz.	8 fl. oz.
Itchgrass	<i>Rottboellia cochinchinensis</i>	2 to 6	6 fl. oz.	8 fl. oz.
Junglerice	<i>Echinochloa colona</i>	2 to 6	6 fl. oz.	8 fl. oz.
Lovegrass (Stinkgrass)	<i>Eragrostis cilianensis</i>	2 to 6	6 fl. oz.	8 fl. oz.
Rabbitsfootgrass	<i>Polypogon monspeliensis</i>	1 to 4	6 fl. oz.	8 fl. oz.
Red Rice	<i>Oryza sativa</i>	1 to 3	6 fl. oz.	8 fl. oz.
Ryegrass				
Hardy	<i>Lolium remotum</i>	2 to 6	6 fl. oz.	8 fl. oz.
Italian	<i>Lolium multiflorum</i>	2 to 6	6 fl. oz.	8 fl. oz.
Seedling Johnsongrass	<i>Sorghum halepense</i>	4 to 10	6 fl. oz.	8 fl. oz.
Shattercane	<i>Sorghum bicolor</i>	6 to 18	6 fl. oz.	8 fl. oz.
Southwestern Cupgrass	<i>Eriochloa gracilis</i>	2 to 6	6 fl. oz.	8 fl. oz.
Sprangletop				
Amazon	<i>Leptochloa panicoides</i>	2 to 6	6 fl. oz.	8 fl. oz.
Bearded	<i>Leptochloa fascicularis</i>	2 to 6	6 fl. oz.	8 fl. oz.
Mexican	<i>Leptochloa uninervia</i>	2 to 6	6 fl. oz.	8 fl. oz.

LPI CLETHODIM
EPA REG. NO. 34704-954

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* INCHES	RATE PER ACRE - LOW	RATE PER ACRE - HIGH ⁴
Red	<i>Leptochloa filiformis</i>	2 to 6	6 fl. oz.	8 fl. oz.
Texas Panicum	<i>Panicum texanum</i>	2 to 6	6 fl. oz.	8 fl. oz.
Volunteer Cereals ³				
Barley	<i>Hordeum vulgare</i>	2 to 6	6 fl. oz.	8 fl. oz.
Oats	<i>Avena sativa</i>	2 to 6	6 fl. oz.	8 fl. oz.
Rye	<i>Secale cereale</i>	2 to 6	6 fl. oz.	8 fl. oz.
Wheat	<i>Triticum aestivum</i>	2 to 6	6 fl. oz.	8 fl. oz.
Volunteer Corn ²	<i>Zea mays</i>	4 to 12	4 fl. oz.	6 fl. oz.
Volunteer Corn (S.R.) ¹	<i>Zea mays</i>	4 to 12	8 fl. oz.	(suppression only)
Volunteer Corn ²	<i>Zea mays</i>	12 to 24	6 fl. oz.	8 fl. oz.
Volunteer Grain Sorghum	<i>Sorghum bicolor</i>	8 to 12	6 fl. oz.	8 fl. oz.
Wild Oats	<i>Avena fatua</i>	2 to 6	6 fl. oz.	8 fl. oz.
Wild Proso Millet	<i>Panicum miliaceum</i>	2 to 10	6 fl. oz.	8 fl. oz.
Witchgrass	<i>Panicum capillare</i>	2 to 8	6 fl. oz.	8 fl. oz.
Woolly Cupgrass	<i>Eriochloa villosa</i>	2 to 8	6 fl. oz.	8 fl. oz.

*Usually occurs between 3-leaf stage and tillering

**Length of lateral growth

¹ Sethoxydim-resistant volunteer corn.

² Includes Roundup Ready®, Liberty Link®, and IMI-CORN® VOLUNTEER CORN.

³ 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 use rate of this product for control is 8 fl. oz./A (0.125 lb. ai/A).

⁴ Rates higher than 8 fl. oz./A (0.125 lb. ai/A) may be applied in certain geographic areas, cropping situations, or environmental conditions where experience has shown that higher rates are needed for satisfactory control of annual grasses. In these situations, rates from 8 to 16 fl. oz./A (0.25 lb. ai/A) may be applied. Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) of this product per application to the following crops: asparagus, carrots, cranberries, cucurbits, flax, fruiting vegetables (except tomatoes), garden beets, green onions, head and stem brassica vegetables, herbs, hops, leaf petioles, leafy brassica greens, leafy greens, non-bearing food crops, root vegetables, safflower, sesame, and strawberries. Do not apply more than 6 fl. oz. of this product per acre per application to canola or mustard seed.

**DIRECTIONS FOR ANNUAL & PERENNIAL GRASS CONTROL IN ESTABLISHED
ALFALFA AND MINT WITH LPI CLETHODIM**

GRASS SPECIES	WEED STAGE	RATE PER ACRE - LOW	RATE PER ACRE - HIGH
Annual & Perennial Grasses Listed in Grass Table	See Table	10 fl. oz	16 fl. oz

Restrictions:

- Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.
- Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.
- Do not apply more than 4 applications per year.

Mowing: The best control of annual grasses can be achieved by applying this product 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 this product for partial or complete control.

LPI CLETHODIM
EPA REG. NO. 34704-954

Irrigated Alfalfa and Mint: Irrigation practices can be very critical to the successful use of this product in established alfalfa and mint and may be necessary to initiate active growth of the weeds prior to application. 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 this product in a minimum of 10 GPA in established alfalfa and mint when applying by air.

Annual Grass Control: Apply this product at the grass sized indicated in the **Directions for Control of Annual Grasses Table** and rates. If a grass has been cut, apply this product 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 this product 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 year 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: This product effectively controls perennial grasses such as bermudagrass, johnsongrass, quackgrass, wirestem muhly, tall fescue, foxtail barley, and orchardgrass. Due in part to lack of tillage, perennial grasses are more difficult to control in a perennial crop such as established alfalfa or mint. A program of repeated applications is usually necessary for best results. The best way to control perennial grasses is to do so in the year of stand establishment before rhizomes and stolons become large and difficult to kill.

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

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

DIRECTIONS FOR ANNUAL BLUEGRASS CONTROL WITH LPI CLETHODIM

GRASS SPECIES	WEED STAGE	RATE PER ACRE -	
		LOW	HIGH
Annual Bluegrass (<i>Poa annua</i>)	to 4-leaf	6 fl. oz.*	16 fl. oz.

Restrictions:

- Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.
- Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.
- Do not apply more than 4 applications per year.

Apply under favorable soil moisture and humidity which exists within a few days after rainfall or within 7 days after irrigation. Grass needs to be actively growing at time of application(s).

Apply at weed stage indicated on the label, as reduced control can be expected with more mature annual bluegrass.

Use the high rate under heavy grass pressure and/or when annual bluegrass is more mature.

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

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

**LPI CLETHODIM
EPA REG. NO. 34704-954**

**DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES
IN CANOLA, DRY SHELLED BEANS AND PEAS (INCLUDING SOYBEANS),
EDIBLE-PODDED LEGUMES VEGETABLES, FLAX, MUSTARD SEED,
SUCCULENT BEANS AND PEAS, AND SUGAR BEETS.**

(REDUCED RATE DIRECTIONS NOT FOR USE IN CALIFORNIA)

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

Restrictions:

- Do not apply more than 5 fl. oz. (0.078 lb. ai) per acre per application.
- Do not exceed the maximum yearly rate listed in the table, CROP-SPECIFIC INSTRUCTIONS, RESTRICTIONS AND LIMITATIONS FOR LPI CLETHODIM.
- Do not exceed the maximum number of annual applications listed in the table, CROP-SPECIFIC INSTRUCTIONS, RESTRICTIONS AND LIMITATIONS FOR LPI CLETHODIM.

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT INCHES	RATE PER ACRE¹
Barnyardgrass	<i>Echinochloa crus-galli</i>	1 to 4	4 fl. oz.
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	1 to 4	5 fl. oz.
Crabgrass			
Large	<i>Digitaria sanguinalis</i>	1 to 3*	4 fl. oz.
Large	<i>Digitaria sanguinalis</i>	1 to 4*	5 fl. oz.
Smooth	<i>Digitaria ischaemum</i>	1 to 3*	4 fl. oz.
Smooth	<i>Digitaria ischaemum</i>	1 to 4*	5 fl. oz.
Southern	<i>Digitaria ciliaris</i>	1 to 4*	5 fl. oz.
Fall Panicum	<i>Panicum dichotomiflorum</i>	1 to 4	4 fl. oz.
Foxtail			
Giant	<i>Setaria faberi</i>	1 to 4	4 fl. oz.
Green	<i>Setaria viridis</i>	1 to 4	4 fl. oz.
Millet	<i>Setaria italica</i>	1 to 4	5 fl. oz.
Yellow	<i>Setaria glauca</i>	1 to 4	4 fl. oz.
Seedling Johnsongrass	<i>Sorghum halepense</i>	1 to 6	5 fl. oz.
Shattercane	<i>Sorghum bicolor</i>	4 to 10	4 fl. oz.
Texas Panicum	<i>Panicum texanum</i>	1 to 4	5 fl. oz.
Volunteer Cereals			
Barley	<i>Hordeum vulgare</i>	1 to 4	5 fl. oz.
Oats	<i>Avena sativa</i>	1 to 4	5 fl. oz.
Wheat	<i>Triticum aestivum</i>	1 to 4	5 fl. oz.
Volunteer Corn**	<i>Zea mays</i>	4 to 12	4 fl. oz.
Wild Proso Millet	<i>Panicum millaceum</i>	1 to 6	4 fl. oz.
Wild Oats	<i>Avena fatua</i>	1 to 4	5 fl. oz.

*Length of lateral growth

**Not S.R. Corn

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

DIRECTIONS FOR PERENNIAL GRASSES

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

LPI CLETHODIM
EPA REG. NO. 34704-954

Restrictions:

- Do not exceed the maximum per application rate listed in the table, CROP-SPECIFIC INSTRUCTIONS, RESTRICTIONS AND LIMITATIONS FOR LPI CLETHODIM.
- Do not exceed the maximum yearly rate listed in the table, CROP-SPECIFIC INSTRUCTIONS, RESTRICTIONS AND LIMITATIONS FOR LPI CLETHODIM.
- Do not exceed the maximum number of annual applications listed in the table, CROP-SPECIFIC INSTRUCTIONS, RESTRICTIONS AND LIMITATIONS FOR LPI CLETHODIM.

GRASS SPECIES	WEED HEIGHT INCHES	RATE PER ACRE - LOW	RATE PER ACRE - HIGH
Bermudagrass (<i>Cynodon dactylon</i>)			
First Application	3 (or up to 6" runners)	8 fl. oz.	16 fl. oz.
Repeat Application(s) (if re-growth occurs)	3 (or up to 6" runners)	8 fl. oz.	16 fl. oz.
Fescue, Tall (<i>Festuca arundinacea</i>)			
First Application	4 to 8	8 fl. oz.	16 fl. oz.
Repeat Application(s) (if re-growth occurs)	4 to 8	8 fl. oz.	16 fl. oz.
Foxtail Barley (<i>Hordeum jubatum</i>)			
First Application	2 to 6	8 fl. oz.	16 fl. oz.
Repeat Application(s) (if re-growth occurs)	2 to 6	8 fl. oz.	16 fl. oz.
Orchardgrass (<i>Dactylis glomerata</i>)			
First Application	4 to 8	8 fl. oz.	16 fl. oz.
Repeat Application(s) (if re-growth occurs)	4 to 8	8 fl. oz.	16 fl. oz.
Quackgrass* (<i>Agropyron repens</i>)			
First Application	4 to 12	8 fl. oz.	16 fl. oz.
Repeat Application(s) (if re-growth occurs)	4 to 12	8 fl. oz.	16 fl. oz.
Rhizome Johnsongrass (<i>Sorghum halepense</i>)			
First Application	12 to 24	8 fl. oz.	16 fl. oz.
Repeat Application(s) (if re-growth occurs)	6 to 18	6 fl. oz.	8 fl. oz.
Wirestem Muhly (<i>Muhlenbergia frondosa</i>)			
First Application	4 to 8	8 fl. oz.	16 fl. oz.
Repeat Application(s) (if re-growth occurs)	4 to 8	8 fl. oz.	16 fl. oz.
Perennial Bluegrass* [Roughstalk (<i>Poa trivialis</i>)] [Kentucky (<i>Poa prantensis</i>)]			
First Application	2 to 4	8 fl. oz.	16 fl. oz.
Repeat Application(s) (if re-growth occurs)	2 to 4	8 fl. oz.	16 fl. oz.
Bentgrass* (<i>Agrostis</i> spp.)			
First Application	2 to 4	--	16 fl. oz.
Repeat Application(s) (if re-growth occurs)	2 to 4	--	16 fl. oz.

*Control of quackgrass and perennial bluegrass with this product may be enhanced by adding AMS at 2.5 to 4.0 lbs./A.

TANK MIXES INFORMATION

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

1. Geographic restrictions: all products are not registered for use in all areas and rates may vary from one region of labeled use to another;
2. Crop rotation restrictions;
3. Applicator certification requirements;
4. Worker safety rules (e.g. protective clothing, re-entry time, posting);
5. Soil type or soil characteristics (e.g. pH, OM);
6. Maximum dosage or number of applications per year;

**LPI CLETHODIM
EPA REG. NO. 34704-954**

7. Rain-free period required; or
8. Application timing (e.g. pre-harvest interval).
9. **Do not exceed the total annual rates.**

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

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

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

- Apply only to actively growing grass and broadleaf weeds at indicated height or growth stage listed on each label.
- Apply when the first grass or broadleaf weed species in a mixed population reaches the indicated height or growth stage for treatment.
- Apply under favorable soil moisture and humidity, which exist a few days after rainfall or within seven days after irrigation.
- Always add the appropriate adjuvant to the spray mix at the rate indicated 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 re-growth occurs, or an additional flush of new grass emerges, make a second application of this product, as specified in the respective size and rate tables.
- Do not tank mix this product when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.

MIXING INSTRUCTIONS

1. Fill clean spray tank to 1/2 to 2/3 of desired level with clean water.
2. While agitating, add the correct amount of this product. Agitation will create a rippling or rolling action of the water surface.
3. If tank mixing this product 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 operations.
4. Add any required adjuvants (crop oil concentrate, non-ionic surfactant and/or nitrogen solution).
5. Fill spray tank to desired level with water. Continue agitation until all spray solution has been applied.

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

INFORMATION ON ANTAGONISM

Tank mixes of this product with post-emergence broadleaf herbicides have shown some reduction or failure to control certain grass species, which would have otherwise been controlled when this product is applied alone. Activity of the post-emergence broadleaf herbicide in the tank mix is not affected.

ALFALFA

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

**LPI CLETHODIM
EPA REG. NO. 34704-954**

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
LPI Clethodim + 2,4-DB ⁴	10 to 16 fl. oz. + Refer to product label	10 to 16 fl. oz. + Refer to product label	1%	1%
LPI Clethodim + Pursuit® DG ⁵ OR Pursuit ⁵	10 to 16 fl. oz. + Refer to product labels.	--	1%	1%
LPI Clethodim + Broclean® 2L ^{6,7}	10 to 16 fl. oz. + Refer to product label.			

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

² Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not advised in these situations.

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

⁴ This product 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 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 tank mix of this product plus Broclean 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. Applications of this product plus Broclean 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. Applications of this product plus Broclean 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 application of this product plus Broclean. 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 TANK MIXES WITH BROADLEAF HERBICIDES FOR CANOLA
(Refer to the tables above for specific grasses and growth stages.)

**LPI CLETHODIM
EPA REG. NO. 34704-954**

PRODUCT	APPLICATION RATES/ACRE		AMMONIUM SULFATE	
	ANNUAL GRASSES ¹	PERENNIAL GRASSES	GROUND	AIR
Intensity Post-Emergence Grass Herbicide ² + Liberty® ³	4 to 5 fl. oz. + Refer to product label.	-	3 lbs.	3 lbs.

¹ Annual grasses and sizes controlled with these tank mixtures are those that are identified in the **Directions for Reduced Rate to Control Small Annual Grasses Table**.

² Do not apply a tank mix including this product during or after bolting or flowering or crop injury may occur.

³ For use only on Liberty Link® canola.

COTTON

TABLE 3. LPI CLETHODIM TANKS MIXED WITH COBRA® HERBICIDE AND MSMA APPLIED POST-DIRECTED TO COTTON

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V) GROUND	COMMENTS
	ANNUAL GRASSES	PERENNIAL GRASSES		
LPI Clethodim ⁴ + Cobra® Herbicide + MSMA (4 lbs./gal.) OR MSMA (6.6 lbs./gal.)	6 to 8 fl. oz.	8 to 16 fl. oz.	1%	Reduce broadcast rate in proportion to the band area actually treated.
	Refer to product label for rates to control broadleaf weeds and height limitations for cotton. Refer to this product's label for weed height and species controlled.			
	Refer to product for rates to control broadleaf weeds and height limitations for cotton. Refer to this product's label for weed height and species controlled.			

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

² Broadleaf weed control may be reduced when grass populations are tall enough or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not advised in these situations.

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

⁴ If at the time of application, grass height is so tall that post-directed applications cannot get good coverage over the top of the grassy weeds, then poor control may result and a second (non-post-directed) application of this product may be necessary.

TABLE 4. LPI CLETHODIM TANK MIXED WITH BUCTRIL® 4EC HERBICIDE TO CONTROL EMERGED WEEDS IN BXN COTTON AS A BROADCAST APPLICATION

PRODUCT ²	APPLICATION RATES/ACRE ¹	CROP OIL CONCENTRATE PER ACRE ³	COMMENTS ⁷
	ANNUAL GRASSES		
Intensity Post-Emergence Grass Herbicide + Buctril 4EC Herbicide ^{4,5,6}	8 to 16 fl. oz. Refer to product label for rates to control broadleaf weeds and height limitations for cotton.	1 qt./A	See charts for grasses controlled.

¹ If grass regrowth occurs or an additional flush of new grass emerges, make a second

**LPI CLETHODIM
EPA REG. NO. 34704-954**

application of this product at the indicated rate with the appropriate amount of crop oil concentrate in a non-Buctril tank mix.

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

PRODUCT	APPLICATIONS RATES/ACRE ¹		ADJUVANT		COMMENTS
	ANNUAL GRASSES	PERENNIAL GRASSES	Glyphosate formulation with built-in adjuvant (such as Makaze®)	Glyphosate formulation without built-in adjuvant (such as Mad Dog®)	
Intensity Post-Emergence Grass Herbicide + Glyphosate	6 to 8 fl. oz. See glyphosate label for rates to control broadleaf weeds and height limitations for cotton.	8 to 16 fl. oz.	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.	Crop oil concentrate at 1 pt./A plus ammonium sulfate at 8.5 to 17 lbs. per 100 gals. of carrier.	See charts for grasses controlled. Use a minimum of 10 gals. of spray solution per acre.

¹ If grass regrowth occurs or an additional flush of new grass emerges, make a second application of this product at the specified rate with the appropriate amount of crop oil concentrate.

DRY SHELLED AND SUCCULENT BEANS

TABLE 6. LPI CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR DRY SHELLED AND SUCCULENT BEANS

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

PRODUCT ²	APPLICATION RATE/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
Intensity Post-Emergence Grass Herbicide + Basagran®	8 to 10 fl. oz. + Refer to product label.	10 to 16 fl. oz. + Refer to product label.	1%	1%

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

² Broadleaf weed control may be reduced when grass populations are tall enough or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not advised in these situations.

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

**LPI CLETHODIM
EPA REG. NO. 34704-954**

spray volume.

FLAX

TABLE 7. REDUCED RATE LPI CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR FLAX

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

PRODUCT ²	APPLICATION RATE/ACRE		CROP OIL CONCENTRATE	
	ANNUAL GRASSES ¹	PERENNIAL GRASSES	GROUND	AIR
Intensity Post-Emergence Grass Herbicide + Bromac® Advanced™ ^{2,3}	4 to 5 fl. oz. + Refer to product label.	-	1 pt.	1 pt.
Intensity Post-Emergence Grass Herbicide + Bromac ^{2,3}	4 to 5 fl. oz. + Refer to product label.	-	1 pt.	1 pt.
Intensity Post-Emergence Grass Herbicide + Broclean® ^{2,3}	4 to 5 fl. oz. + Refer to product label.	-	1 pt.	1 pt.
Intensity Post-Emergence Grass Herbicide + Rhonox® ^{2,3}	4 to 5 fl. oz. + Refer to product label.	-	1 pt.	1 pt.

¹ Annual grasses and sizes controlled with these tank mixtures are those that are identified in the **Directions for Reduced Rate to Control Small Annual Grasses Table**.

² Do not apply a tank mix containing this product 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.

TABLE 8. LPI CLETHODIM TANK MIXES³ TO CONTROL ANNUAL GRASSES WHEN USED AS A BURNDOWN IN NO-TILL SOYBEANS

PRODUCT	PRODUCT ACRE RATE ¹	GRASS HEIGHT	CROP OIL CONCENTRATE ²	28%N OR 32%N QTS./A OR 2.5 TO 4 LBS. AMS
Intensity Post-Emergence Grass Herbicide + 2,4-D Ester* ³	3 fl. oz.	Foxtail 1 to 3" Fall Panicum 1 to 3"	1 qt./A	1 to 2 qts./A OR 2.5 to 4 lbs. AMS
	4 fl. oz.	Foxtail 1 to 4" Fall Panicum 1 to 4"	1 qt./A	1 to 2 qts./A OR 2.5 to 4 lbs. AMS
	6 to 8 fl. oz. + Refer to product label.	(See Grass Chart for grasses claimed)	1 qt./A	1 to 2 qts./A OR 2.5 to 4 lbs. AMS

**LPI CLETHODIM
EPA REG. NO. 34704-954**

- * Do not use 2,4-D Ester where drift-sensitive crops may be grown.
- ¹ If regrowth occurs or an additional flush of new grass emerges, make a second application of this product according to the labeled size and rate.
 - 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 this product plus 2,4-D Ester: Valor®, Authority® Broadleaf, Canopy XL®, Dual II®, Dual II Magnum®, Stealth®, Metribuzin 75, and Metribuzin 75 plus the Dual products.

TABLE 9. LPI CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEANS

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

PRODUCT ²	APPLICATION RATE/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES ¹	PERENNIAL GRASSES	GROUND	AIR
Intensity Post-Emergence Grass Herbicide + Cobra® Herbicide	6 to 8 fl. oz. + Refer to product label.	8 to 16 fl. oz. + Refer to product label.	0.5 to 1%	1%
Intensity Post-Emergence Grass Herbicide + Basagran® 4 SL	8 to 10 fl. oz. + 1 to 2 pts.	10 to 16 fl. oz. + Refer to product label.	1%	1%
Intensity Post-Emergence Grass Herbicide + Glyphosate (For use on Roundup Ready soybeans only)	6 to 8 fl. oz. + Refer to product label.	8 to 16 fl. oz. + Refer to product label.	0.5 to 1% ⁴	1% ⁴
Intensity Post-Emergence Grass Herbicide + Ultra Blazer®	6 to 8 fl. oz. + Refer to product label.	6 to 8 fl. oz. + Refer to product label.	0.5 to 1%	1%
Intensity Post-Emergence Grass Herbicide + Flexstar® HL Herbicide ⁶	6 to 8 fl. oz. + Refer to product label.	8 to 16 fl. oz. + Refer to product label.	1%	1%
Intensity Post-Emergence Grass Herbicide + Classic® 25 DG	8 to 10 fl. oz. + Refer to product label.	10 to 16 fl. oz. + Refer to product label.	1%	1%
Intensity Post-Emergence Grass Herbicide ⁴ + Pursuit® 70 DG	6 to 8 fl. oz. + Refer to product label.	8 to 16 fl. oz. + Refer to product label.	1%	1%
Intensity Post-Emergence Grass	8 to 10 fl. oz. +	—	0.5%	1%

**LPI CLETHODIM
EPA REG. NO. 34704-954**

PRODUCT ²	APPLICATION RATE/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES ¹	PERENNIAL GRASSES	GROUND	AIR
Herbicide + Cobra Herbicide + Classic 25 DG	Refer to product labels.			
Intensity Post-Emergence Grass + Herbicide ⁵ + Cobra Herbicide + Basagran 4 SL	8 to 10 fl. oz.	—	0.5%	1%

TABLE 9. LPI CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEANS CONT'D.:

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

PRODUCT ²	APPLICATION RATE/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES ¹	PERENNIAL GRASSES	GROUND	AIR
Intensity Post-Emergence Grass + Herbicide ⁵ + Cobra Herbicide + Pursuit 70 DG	8 to 10 fl. oz.	—	0.5%	1%
Intensity Post-Emergence Grass + Herbicide ⁵ + Cobra Herbicide + Resource Herbicide	8 to 10 fl. oz.	—	0.5%	1%
Intensity Post-Emergence Grass + Herbicide + FirstRate®	6 to 8 fl. oz.	8 to 16 fl. oz.	1%	—
Intensity Post-Emergence Grass + Herbicide ⁵ + Cobra Herbicide + FirstRate	6 to 8 fl. oz.	8 to 16 fl. oz.	1%	—
Intensity Post-Emergence Grass + Herbicide ⁵ + Raptor® (1AS)	6 to 8 fl. oz.	—	1%	—
Intensity Post-Emergence Grass + Herbicide ⁵	6 to 8 fl. oz.	—	1%	—

**LPI CLETHODIM
EPA REG. NO. 34704-954**

PRODUCT ²	APPLICATION RATE/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES ¹	PERENNIAL GRASSES	GROUND	AIR
+ Cobra Herbicide + Raptor (1AS)	6 to 8 fl. oz. ⁷ + Refer to product label.	—	1qt./A	—
+ Intensity Post- Emergence Grass Herbicide ⁵ + Synchrony® STS™	6 to 8 fl. oz. ⁷ + Refer to product labels.	—	1qt./A	—
+ Intensity Post- Emergence Grass Herbicide ⁵ + Cobra Herbicide + Synchrony STS	6 to 8 fl. oz. + Refer to product label.	—	1qt./A	—
+ Intensity Post- Emergence Grass Herbicide ⁵ + Resource Herbicide	6 to 8 fl. oz. + Refer to product label.	—	1qt./A	—

TABLE 9. LPI CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEANS CONT'D.:

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

PRODUCT ²	APPLICATION RATE/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES ¹	PERENNIAL GRASSES	GROUND	AIR
+ Intensity Post- Emergence Grass Herbicide + Frontrow™	8 to 10 fl. oz. + Refer to product label.	—	1%	—
+ Intensity Post- Emergence Grass Herbicide + FirstRate + Flexstar HL ⁵	6 to 8 fl. oz. + Refer to product labels.	8 to 16 fl. oz. + Refer to product labels.	1%	—

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

² Broadleaf weed control may be reduced when grass populations are tall enough or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not advised in these situations.

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

⁴ The addition of 2.5 lbs. of ammonium sulfate is required when product is tank mixed with glyphosate. If the glyphosate formulation has a standalone built-in adjuvant, add 0.125% v/v non-ionic surfactant in place of crop oil concentrate. If the glyphosate formulation does

**LPI CLETHODIM
EPA REG. NO. 34704-954**

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 1 to 2 qts. per acre of liquid fertilizer (10-34-0, 28%N, or 32%N) may enhance crop recovery when this product 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 lbs./acre) 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 which are identified in the **Directions for Reduced Rate to Control Small Annual Grasses Table**.

TABLE 10. REDUCED-RATE LPI CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEANS

(Refer to table for reduced-rate use in canola, dry shelled beans & peas, edible-podded legume vegetables, flax, mustard seed, soybeans, succulent beans & peas and sugar beets directions for small annual grasses for specific grasses and growth stages.)

PRODUCT	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ^{3,4} (V/V)	
	ANNUAL GRASSES ²	PERENNIAL GRASSES	GROUND	AIR
LPI Clethodim + FirstRate	4 to 8 fl. oz. +	—	1%	1%
	Refer to product label.			
LPI Clethodim + Pursuit 70 DG	4 to 6 fl. oz. +	—	1%	1%
	Refer to product label.			

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

² Annual grasses and sizes controlled with these tank mixtures are those that are identified in the **Directions for Reduced Rate to Control Small Annual Grasses Table**.

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

⁴ The addition of 1 to 2 qts. per acre of liquid fertilizer (10-34-0, 28%N, or 32%N) is required when this product is tank mixed at reduced rates. An equivalent amount (2.5 to 4 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.

PEANUTS (INCLUDING PERENNIAL)

TABLE 11. LPI CLETHODIM TANK MIXES WITH BROADLEAF HERBICIDES FOR PEANUTS

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

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
LPI Clethodim + Basagran	8 to 10 fl. oz. +	—	1%	1%
	Refer to product label.			
LPI Clethodim	8 to 10 fl. oz.	—	1%	1%

**LPI CLETHODIM
EPA REG. NO. 34704-954**

+ Ultra Blazer	+ Refer to product label.			
LPI Clethodim	8 to 10 fl. oz.	—	1%	1%
+ Storm®	+ Refer to product label.			

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

² Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing may be ineffective in these situations.

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

**DIRECTIONS FOR GRASS SUPPRESSION FOR HARVEST EFFICIENCY IN PEANUTS
{INCLUDING PERENNIAL} WITH LPI CLETHODIM**

GRASS SPECIES	WEED STAGE	RATE FL.OZ./ACRE	HIGH RATE
Annual and perennial grasses that exceed height claimed for control on height charts "DIRECTIONS FOR ANNUAL GRASSES AND DIRECTIONS FOR 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 this product for grass suppression.
- Add a crop oil concentrate at 1 qt./A by ground to the finished spray volume.

TABLE 12. LPI CLETHODIM TANK MIXED WITH STINGER® HERBICIDE APPLIED TO SUGAR BEETS

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

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
LPI Clethodim	6 to 8 fl. oz.	8 to 16 fl. oz.	1%	1%
+ Stinger Herbicide	Refer to product label.			

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

² Broadleaf weed control may be reduced when grass populations are tall enough or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing may be ineffective 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. LPI CLETHODIM TANK MIXED WITH BETAMIX® OR BETANEX® APPLIED TO SUGAR BEETS

PRODUCT ²	WEEDS CONTROLLED		WEED HEIGHT	APPLICATION RATE/ACRE ¹
	COMMON NAME	SCIENTIFIC NAME		

LPI CLETHODIM
EPA REG. NO. 34704-954

PRODUCT ²	WEEDS CONTROLLED		WEED HEIGHT	APPLICATION RATE/ACRE ¹
	COMMON NAME	SCIENTIFIC NAME		
LPI Clethodim ³	Barnyardgrass	<i>Echinochloa crus-galli</i>	1 to 3"	8 fl. oz.
+	Foxtail	<i>Setaria</i> spp.	1 to 3"	
Betamix	Foxtail Millet	<i>Setaria italica</i>	1 to 3"	
OR	Wild Oats	<i>Avena fatua</i>	1 to 3"	
Betanex	Wild Proso Millet	<i>Panicum miliaceum</i>	1 to 3"	

See Betamix label for rates to control broadleaf weeds. **No additives are advised in the tank mix.**

See Betanex label for rates to control broadleaf weeds. **No additives are advised in the tank mix.**

¹ Do not use crop oil concentrate. No additives are advised in the tank mix.

² Broadleaf weed control may be reduced when grass populations are tall enough or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing may be ineffective in these situations.

³ If grass regrowth occurs or an additional flush of new grass emerges, make a second application of this product at full label rate with appropriate rate of crop oil concentrate.

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

PRODUCT	APPLICATION RATE/ACRE ¹		METHYLATED SEED OIL ² (V/V)	
	ANNUAL GRASSES	GRASSES CONTROLLED (inches)	GROUND	AIR
LPI Clethodim	2 to 3 fl. oz.	Green Foxtail (1-2)	1.5%	1.5%
+		Yellow Foxtail (1-2)		
Betanex	+	Barnyardgrass (1-2)		
OR		Wild Oats (1-2)		
Betamix		Volunteer Cereals (1-2)		
	Refer to product labels. ³			

¹ Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing may be ineffective in these situations.

² Always use a methylated seed oil at the listed rate (but no 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.

Directions for Use for Micro-Rate Applications to Sugar Beets

Multiple micro-rate applications of this product in tank mixtures with reduced rates of Betanex or Betamix and methylated seed oils may be applied by air or ground equipment to sugar beets to control early germinating annual grasses listed above. Refer to product labels for maximum application rate 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 lb. 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

**LPI CLETHODIM
EPA REG. NO. 34704-954**

master labels must be followed.

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

Apply this product 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. Use a minimum of three sequential applications of 2 fl. oz./A or a minimum of 2 sequential applications of 3 fl. oz./A for tank mixtures containing this product. Use a minimum of 3 sequential applications of Betamix or Betanex.

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 this product (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 this product, a spray adjuvant is not needed.

Use Precautions for Micro-Rate Applications: (See LPI Clethodim, Betanex, and Betamix master labels for further use precautions.)

Not all weeds will be adequately controlled, even with favorable climatic conditions. Conventional rates of this product, 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.

Loveland Products, 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 lb. ai/A broadcast, as the addition of methylated seed oils could increase the possibility of crop injury at dosage rates greater than 0.12 lb. 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. Use a minimum of 30 psi and a maximum of 60 psi as reflected 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 LPI CLETHODIM AND FUNGICIDES FOR CONTROL OF GRASS WEEDS AND DISEASES IN SUGAR BEETS

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)
	ANNUAL GRASSES	PERENNIAL GRASSES	
LPI Clethodim	6 to 8 fl. oz.	8 to 16 fl. oz.	1%
+	+	+	
Eminent®	Refer to product label.	Refer to product label.	

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

² Refer to this product label 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.

**LPI CLETHODIM
EPA REG. NO. 34704-954**

TABLE 16. TANK MIX APPLICATION OF LPI CLETHODIM AND INSECTICIDES FOR CONTROL OF GRASS WEEDS AND INSECTS IN ALFALFA, COTTON, MINT, PEANUTS (INCLUDING PERENNIAL), SOYBEANS AND SUNFLOWERS

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONC. ³ (V/V)	CROP					
	ANNUAL GRASSES	PERENNIAL GRASSES		Alfalfa ⁴	Cotton	Mint ^{4,5}	Peanuts	Soybeans	Sunflowers
LPI Clethodim + Orthene® 75 S OR Orthene 97	6 to 8 fl. oz. +	8 to 16 fl. oz. +	1%		X	X	X		
LPI Clethodim + Orthene® 90 S	6 to 8 fl. oz. +	8 to 16 fl. oz. +	1%		X	X	X	X	
LPI Clethodim + Danitol® 2.4 EC	6 to 8 fl. oz. +	6 to 8 fl. oz. +	1%		X		X		
LPI Clethodim + Asana® XL	6 to 8 fl. oz. +	8 to 16 fl. oz. +	1%						X
LPI Clethodim + Warrior®	6 to 8 fl. oz. +	8 to 16 fl. oz. +	1%						X
<i>LPI Clethodim</i>									
LPI Clethodim + Warrior	10 to 16 fl. oz. ⁷ +	10 to 16 fl. oz. +	1%		X				
LPI Clethodim + Tombstone®	10 to 16 fl. oz. +	10 to 16 fl. oz. +	1%		X				
LPI Clethodim + Dimethoate	10 to 16 fl. oz. ⁷ +	10 to 16 fl. oz. +	1%		X				
LPI Clethodim + Warhawk®	10 to 16 fl. oz. ⁷ +	10 to 16 fl. oz. +	1 to 2pts. ⁸		X				
LPI Clethodim + Permethrin	10 to 16 fl. oz. ⁷ +	10 to 16 fl. oz. +	1%		X				

¹ If grass regrowth occurs, or an additional flush of new grass emerges, make a second application of this product alone (without a tank mix insecticide) according to the labeled size and rate.

² Refer to this product label and insecticide label for rates, 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, a small area of the field be treated first and

**LPI CLETHODIM
EPA REG. NO. 34704-954**

- observations for crop injury be made prior to treating the whole field.
- 5 Use this product at a rate of 6 to 8 fl. oz./A for annual grass control in baby mint, with a minimum of 8 fl. oz./A for annual grass control in established mint and 8 to 16 fl. oz./A for perennial grass control. Add crop oil concentrate at the rate of 1 to 2 pts./A.
- 6 Insecticide tank mix use with Orthene 90S in soybeans is permitted only in a state having an approved Section 24(c) registration for Orthene 90S use in soybeans.
- 7 Use this product at a rate of 6 to 8 fl. oz./A for annual grass control in seedling alfalfa.
- 8 For the tank mix of this product plus Warhawk, reduce the adjuvant rate down to 1 pt./A when the Warhawk rate is 1 pt./A or higher.

Table 17. Roundup Ready® Volunteer corn control in Roundup Ready Soybeans with Intensity Post-Emergence Grass Herbicide Tank Mixes

Roundup Ready Volunteer Corn Height (inches)	LPI Clethodim Rate fl. oz./A	Glyphosate ¹ rate for formulations with built-in adjuvant (such as Makaze)	Adjuvant
<12 12 to 18 18 to 24	4 5 6	Refer to product label.	Non-ionic surfactant @ 0.125 to 0.25% v/v plus ammonium sulfate @ 8.5 to 17 lbs. per 100 gals. of carrier.
Roundup Ready Volunteer Corn Height (inches)	Intensity Post-Emergence Grass Herbicide Rate fl. oz./A	Glyphosate ¹ rate for formulations without built-in adjuvant (such as Mad Dog)	Adjuvant
<12 12 to 18 18 to 24	4 5 6	Refer to product label.	Crop oil concentrate @ 1 pt./A plus ammonium sulfate @ 8.5 to 17 lbs. per 100 gals. of carrier.

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

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

- Apply only to actively growing grass and broadleaf weeds at indicated height or growth stage listed on each label.
- Apply under favorable soil moisture and humidity which exists 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 this product as specified in the respective size and rate tables.
- Do not tank mix this product when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.
- This tank mix may be applied postemergence to Roundup Ready soybeans up through the full flowering stage. Do not apply less than 60 days before harvest.
- Avoid contact with foliage, green stems, or fruit crops, or any desirable plants and trees, other than soybeans with the Roundup Ready gene as severe injury or destruction will result.
- Do not allow the tank mix of this product plus glyphosate to mist, drip, drift, or splash onto desirable vegetation as minute quantities of the tank mix can cause severe damage or destruction to the crops, plants, or other areas on which treatment was not intended. The likelihood of injury occurring from drift of this product is greatest when winds are gusty or in excess of 5 miles per hour. Even under lesser wind velocities, avoid conditions that allow spray drift to occur such as combinations of spray pressure and nozzle type that will result in fine particles (mist) that are likely to drift.

FALLOW LAND

DIRECTIONS FOR USE

LPI CLETHODIM
EPA REG. NO. 34704-954

This product may be used to control annual and perennial grasses in land that has been left fallow the previous year and other non-producing agricultural areas. Apply this product 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, this product may be tank mixed with 2,4-D Ester or Banvel SGF Herbicide for broad spectrum control. When both annual and perennial grasses occur in the same field, use a minimum of 8 fl. oz./A of this product.

GENERAL 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 indicated weed height as specified by the **Directions for Annual and Perennial Grasses** section of this label.
- Annual grasses which emerge after application of this product will not be controlled and a second application may be necessary.
- The control of perennial grasses may require more than one application in non-tilled areas.

Restrictions:

- Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.
- Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.
- Do not apply more than 4 applications per year.
- Do not plant any crop for 30 days after application unless this product is registered for use in that crop.
- Do not apply to grasses that have tillered, formed seed heads, or exceeded indicated growth stage.
- Do not use flood jet nozzles.
- Do not apply to drought-stressed grasses.
- Do not mow area for two weeks prior to or after the application of this product.

LPI Clethodim in tank mixes to control annual and perennial Grasses in Fallow Land

PRODUCT	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ² (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
LPI Clethodim + 2,4-D Ester OR Banvel SGF	6 to 8 fl. oz. +	8 to 16 fl. oz. +		1% v/v
	Refer to product label.	Refer to product label.		

¹ Refer to this product label for weed height and species control. Review Banvel SGF Herbicide and 2,4-D labels for crop restrictions, use rates, and weeds controlled.

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

DIRECTIONS FOR GRASS SUPPRESSION IN NON-CROP AREAS WITH LPI CLETHODIM

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

Restrictions:

- Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.
- Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.
- Do not apply more than 4 applications per year.

LPI CLETHODIM
EPA REG. NO. 34704-954

- Do not apply as part of a tank mix when applying this product for grass suppression.
- Add a crop oil concentrate at 1 qt./A by ground to the finished spray volume.

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

PRODUCT	PRODUCT RATE	GRASS WEEDS CONTROLLED/SUPPRESSED		WEED STAGE
		COMMON NAME	SCIENTIFIC NAME	
LPI Clethodim	10 to 12 fl. oz./A	Tall Fescue	<i>Festuca Arundinacea</i>	4 to 6 in. (40 to 60% green-up)

Adjuvant: This product 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 this product, then add crop oil concentrate.

Restrictions:

- Do not apply more than 12 fl. oz. (0.188 lb. ai) per acre per application.
- Do not apply more than 24 fl. oz. (0.375 lb. ai) per acre per year.
- Do not apply more than 2 applications per year.

APPLICATION PRECAUTIONS & RESTRICTIONS

- 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.
- Application of this product are most effective if applied when average nighttime temperatures are consistently greater than or equal to 47 degrees Fahrenheit.

Restrictions:

- Do not mow area for 2 weeks after the application of this product.
- 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 two years. Applications of this product 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 this product is registered for use in that crop.
-

LPI CLETHODIM FOR THE SUPPRESSION OF TALL FESCUE SEED-HEADS IN NON-PRODUCING AGRICULTURAL AREAS

PRODUCT	PRODUCT RATE	SUPPRESSIONS	APPLICATION TIMING
LPI Clethodim	1-1/2 to 2 fl. oz./A	Tall Fescue Seed-Heads (<i>Festuca arundinacea</i>)	50 to 90% Tall Fescue green-up

Adjuvant: This product 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 this product, then add crop oil concentrate.

APPLICATION PRECAUTIONS & RESTRICTIONS

- Apply at 50 to 90% tall fescue green-up.
- Use the higher rate of this product if less tall fescue green matter is present.

Restrictions:

LPI CLETHODIM
EPA REG. NO. 34704-954

- Do not apply more than 2 fl. oz. (0.031 lb. ai) per acre per application.
- Do not apply more than 8 fl. oz. (0.125 lb. ai) per acre per year.
- Do not apply more than 4 applications per year.
- Do not mow area for 2 weeks after the application of this product.
- 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 this product is registered for use in that crop.

DIRECTIONS FOR USE IN ORNAMENTALS

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

Restrictions:

- Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.
- Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.
- Do not apply more than 4 applications per year.

IMPORTANT: This product successfully controls weeds in newly transplanted and established non-grassy ornamentals. Plant sensitivity to this product 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 this product has investigated the safety factor to ornamental plants not listed on the label.

The following plants have shown to not be sensitive towards application of this product:

ORNAMENTAL TREES

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
ALDER, RED	<i>Alnus oregona</i>	GOLDEN CHAIN TREE	<i>Laburnum anagyroides</i>
ASH	<i>Fraxinus</i> spp.	MAPLES	<i>Acer</i> spp.
BASSWOOD	<i>Tilia</i> spp.	MULBERRY, WHITE	<i>Morus alba</i>
BIRCH, EUROPEAN WHITE	<i>Betula pendula</i>	OAKS	<i>Quercus</i> spp.
BIRCH, RIVER	<i>Betula nigra</i>	OLIVE, WILD	<i>Elaeagnus angustifolia</i>
BIRCH, WHITE	<i>Betula papyrifera</i>	REDBUD, EASTERN	<i>Cercis canadensis</i>
CRABAPPLE, FLOWERING	<i>Malus halliana</i>	SWEET GUM, AMERICAN	<i>Liquidambar styraciflua</i>
DOGWOOD, FLOWERING	<i>Comus florida</i>		

GARDEN FLOWERS AND PLANTS

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
AGERATUM	<i>Ageratum</i> spp.	JASMINE TOBACCO	<i>Nicotiana glauca</i>
ALYSSUM*, SWEET	<i>Lobularia maritima</i>	LOOSESTRIFE	<i>Lythrum salicaria</i>
ASPARAGUS FERN	<i>Asparagus setaceus</i>	MARIGOLD	<i>Tagetes</i> spp.
BLEEDING HEART	<i>Dicentra spectabilis</i>	PARTRIDGEBERRY	<i>Mitchella repens</i>
CAST IRON PLANT	<i>Aspidistra elatior</i>	PETUNIA*	<i>Petunia hybrida</i>
CHRYSANTHEMUM	<i>Chrysanthemum</i> spp.	PHLOX	<i>Phlox</i> spp.
CINQUEFOIL	<i>Potentilla</i> spp.	PINKS	<i>Dianthus</i> spp.

**LPI CLETHODIM
EPA REG. NO. 34704-954**

GARDEN FLOWERS AND PLANTS

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
COLEUS	<i>Coleus</i> spp.	PORTULACA	<i>Portulaca grandiflora</i>
CORALBELLS	<i>Heuchera sanguinea</i>	SALVIA	<i>Salvia</i> spp.
CRANESBILL	<i>Geranium</i> spp.	SAXIFRAGE	<i>Saxifraga</i> spp.
DAHLIA	<i>Dahlia</i> spp.	SEDUM	<i>Sedum</i> spp.
DAISY, AFRICAN	<i>Osteospermum fruticosum</i>	SELLOUM	<i>Philodendron selloum</i>
DAYLILY	<i>Hemerocallis</i> spp.	SNAPDRAGON*	<i>Antirrhinum majus</i>
DUSTY MILLER	<i>Senecio cineraria</i>	SWEET FLAG	<i>Acorus gramineus</i>
EUONYMUS	<i>Euonymus</i> spp.	TICKSEED	<i>Coreopsis grandiflora</i>
GAZANIA	<i>Gazania</i> spp.	TOUCH-ME-NOT	<i>Impatiens</i> spp.
GERANIUM, HOUSE	<i>Pelargonium hortorum</i>	VERBENA	<i>Verbena</i> spp.
HEATHER, FALSE	<i>Cuphea hyssopifolia</i>	VIOLET	<i>Viola</i> spp.
HOSTA	<i>Hosta fortunei</i>	YARROW, COMMON	<i>Achillea millefolium</i>
IRIS	<i>Iris</i> spp.	ZINNIA	<i>Zinnia elegans</i>

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

GROUND COVERS

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
BUGLEWEED, CARPET	<i>Ajuga reptans</i>	MONEYWORT	<i>Lysimachia nummularia</i>
IVY, ENGLISH	<i>Hedera helix</i>	MONDO GRASS, WHITE	<i>Ophiopogon jaburan</i>
JAPANESE SPURGE	<i>Pachysandra terminalis</i>	MONDO GRASS, DWARF	<i>Ophiopogon japonicus</i>
LILYTURF	<i>Liriope muscari</i>	PERIWINKLE, LESSER	<i>Vinca minor</i>

SHRUBS

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
ABELIA	<i>Abelia</i> spp.	JASMINE, ASIATIC	<i>Trachelospermum asiaticum</i>
ANISE, PURPLE	<i>Illicium floridanum</i>	JASMINE, STAR	<i>Trachelospermum jasminoides</i>
AUCUBA	<i>Aucuba</i> spp.	JUNIPER	<i>Juniperus</i> spp.
AZALEA*	<i>Rhododendron</i> spp.	LANTANA	<i>Lantana</i> spp.
BAMBOO	<i>Bambusa</i> spp.	NANDINA* BAMBOO, HEAVENLY	<i>Nandinia domestica</i>
BARBERRY, JAPANESE	<i>Berberis thunbergii</i>	OLEANDER, COMMON	<i>Nerium oleander</i>
BARBERRY, MAGELLAN	<i>Berberis buxifolia</i>	OREGON GRAPE	<i>Mahonia aquifolium</i>
BAYBERRY	<i>Myrica pensylvanica</i>	PHOTINIA	<i>Photinia</i> spp.
BOTTLEBRUSH	<i>Callistemon citrinus</i>	PITTOSPORUM	<i>Pittosporum</i> spp.
BOXWOOD, COMMON	<i>Buxus sempervirens</i>	PODOCARPUS	<i>Podocarpus</i> spp.
CAMELLIA, COMMON	<i>Camellia japonica</i>	PRIVET	<i>Ligustrum</i> spp.
CANDYTUFT	<i>Iberis sempervirens</i>	PYRACANTHA	<i>Pyracantha</i> spp.
CLEYERA	<i>Cleyera japonica</i>	RHODODENDRON	<i>Rhododendron</i> spp.
CORALBERRY	<i>Ardisia crenata</i>	ROSE	<i>Rosa</i> spp.
CRAPE MYRTLE	<i>Lagerstroemia indica</i>	SPIREA	<i>Spiraea bumalda</i>
COYOTE BRUSH	<i>Baccharis pilularis</i>	SWEET OLIVE	<i>Osmanthus fragrans</i>
FIG, CREEPING	<i>Ficus pumila</i>	TEA OLIVE	<i>Osmanthus fragrans</i>
GARDENIA	<i>Gardenia</i> spp.	VIBURNUM	<i>Viburnum tinus</i>
HOLLY	<i>Ilex</i> spp.	WISTERIA	<i>Wisteria</i> spp.
HONEYSUCKLE	<i>Lonicera pileata</i>	YELLOW SAGE/ SHRUB VERBENA	<i>Lantana camara</i>
INDIAN HAWTHORN	<i>Raphiolepis indica</i>		
JASMINE	<i>Jasminum</i> spp.		

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

DIRECTIONS FOR ANNUAL GRASSES IN ORNAMENTALS

LPI CLETHODIM
EPA REG. NO. 34704-954

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

Restrictions:

- Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.
- Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.
- Do not apply more than 4 applications per year.
- Apply only to actively growing grasses at indicated weed heights.

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
BROAD LEAF SIGNALGRASS	<i>Brachiaria platyphylla</i>	2 to 6	8	16
BROME				
California	<i>Bromus carinatus</i>	2 to 6	8	16
Cheatgrass	<i>Bromus secalinus</i>	2 to 6	8	16
Downy	<i>Bromus tectorum</i>	2 to 6	8	16
Ripgut	<i>Bromus diandrus</i>	2 to 6	8	16
CANARY GRASS	<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
FOXTAIL BARLEY	<i>Hordeum jubatum</i>	2 to 6	8	16
GOOSEGRASS	<i>Eleusine indica</i>	2 to 6**	8	16
ITCHGRASS	<i>Rottboellia exaltata</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
SHATTER CANE	<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

LPI CLETHODIM
EPA REG. NO. 34704-954

GRASS SPECIES	SCIENTIFIC NAME	WEED* HEIGHT INCHES	RATE FL. OZ./ACRE ¹	HIGH RATE ²
VOLUNTEER CORN	<i>Zea mays</i>	4 to 12	6	8
VOLUNTEER CORN	<i>Zea mays</i>	12 to 24	8	16
VOLUNTEER GRAIN SORGHUM	<i>Sorghum bicolor</i>	8 to 12	8	16
WILD OATS	<i>Avena fatua</i>	2 to 6	8	16
WILD PROSO MILLET	<i>Panicum miliaceum</i>	2 to 10	8	16
WITCHGRASS	<i>Panicum capillare</i>	2 to 8	8	16
WOOLLY CUPGRASS	<i>Eriochloa villosa</i>	2 to 8	8	16

*Generally occurs between 3-leaf stage and tillering.

**Length of lateral growth.

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

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

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

**DIRECTIONS FOR ANNUAL BLUEGRASS CONTROL
WITH LPI CLETHODIM IN ORNAMENTALS**

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

Restrictions:

- Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.
- Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.
- Do not apply more than 4 applications per year.

DIRECTIONS FOR PERENNIAL GRASSES

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

Restrictions:

- Do not apply more than 16 fl. oz. (0.25 lb. ai) per acre per application.
- Do not apply more than 32 fl. oz. (0.5 lb. ai) per acre per year.
- Do not apply more than 4 applications per year.
- Apply only to actively growing grasses at indicated weed heights.

GRASS SPECIES	WEED Height Inches	RATE FL.OZ./ACRE ¹	HIGH RATE
Bermudagrass (<i>Cynodon dactylon</i>)			
First Application	3 (or up to 6" runners)	8	16
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	8	16
Ouackgrass (<i>Agropyron repens</i>)			

LPI CLETHODIM
EPA REG. NO. 34704-954

GRASS SPECIES	WEED Height Inches	RATE FL.OZ./ACRE ¹	HIGH RATE
First Application	4 to 8	8	16
Repeat Application(s) (if regrowth occurs)	4 to 8	8	16
Rhizome Johnsongrass (<i>Sorghum halepense</i>)			
First Application	12 to 24	8	16
Repeat Application(s) (if regrowth occurs)	6 to 18	6	8
Wirestem Muhly (<i>Muhlenbergia frondosa</i>)			
First Application	4 to 8	8	16
Repeat Application(s) (if regrowth occurs)	4 to 8	8	16

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

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

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

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Open dumping is prohibited.

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

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

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. If not recycled, then 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.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

For packages up to 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over

LPI CLETHODIM
EPA REG. NO. 34704-954

Storage & Disposal cont'd.:

onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For packages greater than 56 gallons: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

For refillable containers: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC - 1-800-424-9300.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND

LPI CLETHODIM
EPA REG. NO. 34704-954

PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

Authority® is a registered trademark of FMC Corporation.

Basagran®, IMI-Corn®, Pursuit®, and Raptor® are registered trademarks of BASF.

Betamix®, Betanex®, Bucril®, and Libertylink®, are registered trademarks of Bayer.

Ultra Blazer®, and Storm® are registered trademarks of United Phosphorus, Inc.

Broclean®, Bromac®, LPI Clethodim®, Mad Dog®, Makaze®, Rifle®, Stealth® and Warhawk® are registered trademarks and Tombstone™ is a trademark of Loveland Products, Inc.

Asana®, Canopy®, Classic® and Synchrony® are registered trademarks and STS™ is a trademark of DuPont de Nemours & Company.

Cobra®, Resource® and Valor® are registered trademarks of Valent U.S.A. Corporation. Danitol® is a registered trademark of Sumitomo Chemical Co., Ltd.

Dual MAGNUM®, Dual II MAGNUM®, Flexstar®, and Warrior® are registered trademarks of a Syngenta Group Company.

Eminent® is a registered trademark of ISAGRO S.p.A.

FirstRate®, Frontrow®, and Stinger® are registered trademarks of Dow AgroSciences, LLC. Orthene® is a registered trademark of OMS Investments, Inc.

Rhonox® is a registered trademark of Nufarm Americas, Inc.

Roundup Ready® and Roundup Weather Max® are registered trademarks of Monsanto Technology LLC.