# Cleanse® 2EC

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*Clethodim	26.4%
OTHER INGREDIENTS**:	73.6%
TOTAL:	100.0%

Contains: 2.0 lbs. Clethodim per gallon

#### **KEEP OUT OF REACH OF CHILDREN**

# **WARNING - AVISO**

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

FIRST AID					
IF IN EYES:	<ul> <li>Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>				
IF SWALLOWED:	<ul> <li>Immediately call a poison control center or doctor.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give any liquid to the person.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>				
<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>					
NOTE TO PHYSICIAN: C	ontains petroleum distillate. Vomiting may cause aspiration pneumonia.				

### **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical assistance, call 1-877-424-7452.

See booklet for additional PRECAUTIONARY STATEMENTS, COMPLETE DIRECTIONS FOR USE, WARRANTY DISCLAIMER AND LIMITATION OF LIABILITY.

EPA Reg. No.: 1381-204 EPA Est. No.:

Distributed By: Winfield Solutions, LLC P.O. Box 64589 St. Paul, MN 55164-0589

NET CONTENTS: Gals.\_\_\_\_ ( Liters)

1/1011/9

 $<sup>\</sup>label{eq:continuous} {}^*(E)-2[1-[[(3-chloro-2-propenyl)oxy]imino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one and the second continuous continuou$ 

<sup>\*\*</sup>Contains Petroleum Distillates

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as Barrier Laminate or Viton ≥ 14 mils
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If 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 after handling and 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.

**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

Combustible. Do not use or store near heat or open flame.

#### **DIRECTIONS FOR USE**

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

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

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

#### AGRICULTURAL USE REQUIREMENTS

Use this produce 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
- Shoes plus socks
- Protective eyewear

#### **NON-AGRICULTURAL USE REQUIREMENTS**

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

Keep all unprotected persons out of operating areas, or vicinity where there may be drift. Do not enter or allow other persons to enter treated areas without protective clothing until sprays have dried.

#### PRODUCT INFORMATION

This product is for use on the following:

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

#### \* Not for use in California

- <sup>1</sup> Other Dry Shelled Bean and Pea crops approved for use with this product include: Bean (*Lupinus* spp.) grain, sweet, white and sweet; Bean (*Phaseolus* spp.), field, kidney, lima (dry), navy, pinto and tepary; Bean (*Vigna* spp.), adzuki, black-eyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, broad (dry), chickpea (garbanzo), guar, lablab bean and lentil; Pea (*Pisum* spp.) field and pigeon
- <sup>2</sup> Other Succulent Bean and Pea crops approved for use with this product include: Bean (*Lupinus* spp.) grain, sweet, white and sweet; Bean (*Phaseolus* spp.), field, kidney, lima (dry), navy, pinto and tepary; Bean (*Vigna* spp.), adzuki, black-eyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, broad (dry), chickpea (garbanzo), guar, lablab bean and lentil; Pea (*Pisum* spp.) field and pigeon
- <sup>3</sup> Other Head and Stem Brassica approved for use with this product include: Chinese broccoli, Brussels sprouts, Chinese (napa) cabbage, Chinese mustard, cavalo broccolo, and kohlrabi
- <sup>4</sup> Other Fruiting Vegetables (except tomato) approved for use with this product include: eggplant, groundcherry, Pepino, peppers (all) and tomatillo
- <sup>5</sup> Other Herb crops approved for use with this product: angelica, balm, basil, borage, burnet, chamomile, catnip, chervil, (dried), chive, Chinese chive, clary, coriander (leaf), costmary, cilantro (leaf), curry (leaf), dill (dillweed), horehound, hyssop, lavender, lovage (leaf), marigold, marjoram (origanum spp), nasturtium, parsley (dried), pennyroyal, rosemary, rue, sage and savory, summer and winter.
- <sup>6</sup> Other Root Vegetables approved for use with this product include: burdock, edible; celeriac; chervil, turnip-rooted; chicory, ginseng; parsley, turnip-rooted; parsnip; radish, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret and turnip.
- Other Edible Podded Legume Vegetable crops approved for use with this product: Bean (Phaseolus spp.), runner, snap and wax; Bean (Vigna spp.) asparagus, Chinese longbean, moth, yardlong, jackbean; Pea (Pisum spp.) dwarf, edible-pod, snow, sugar snap, pigeon, and sword bean.
- <sup>8</sup> Other Leafy Greens crops approved for use with this product include: amaranth (Chinese spinach, leafy amaranth and tampala), arugula (roquette), chervil, chrysanthemum (edible-leaved and garland), corn salad, cress (garden, yellow rock and winter), dandelion, dock (sorrel), endive (escarole), lettuce (head and leaf), orach, parsley, purslane (garden and winter), radicchio (red chicory), spinach (New Zealand and Vine [Indian and Malabar]).
- <sup>6</sup> Other Cucurbit crops approved for use with this product include: chayote (fruit), Chinese wax gourd, citron melon, edible gourd, gherkin and muskmelons (all, including honeydew melon).
- <sup>10</sup> 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.
- <sup>11</sup> Other Leaf Petiole crops approved for use with this product include: cardoon, celtuce, Chinese celery, Florence fennel, and Swiss chard.
- <sup>12</sup> Other Tuber and Corm Vegetables approved for use with this product include: arracacha, arrowroot, Chinese artichoke, Jerusalem artichoke, edible canna, bitter and sweet cassava, chayote (root), chufa, dasheen (taro), ginger, leren, tanier, turmeric and bean yam.

This product is a selective postemergence herbicide for control of annual and perennial grasses. Cleanse<sup>®</sup> 2EC does not control sedges or broadleaf weeds and is not recommended for use on vegetable crops being grown for seed production unless specific instructions are included in this labeling.

Avoid contact of this product 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 can occur on treated plants under certain environmental conditions. New foliage is not affected.

#### SYMPTOMS OF CONTROL

The 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. Depending on grass species treated and environmental conditions, symptoms will generally be observed in 7 to 14 days after application.

#### **APPLICATION INFORMATION**

#### **Timing**

Make application of Cleanse® 2EC postemergence to actively growing grasses according to the rate table. Do not make application to grass plants stressed by insufficient moisture or hot or cold temperature. Applications to grass plants exceeding the growth stages indicated on this label could result in unsatisfactory control. Do not make applications when this occurs.

In arid regions, where irrigation is used to supplement limited rainfall, apply Cleanse<sup>®</sup> 2EC as soon as possible, after an irrigation (within 7 days). A second application of this product will generally provide more effective control of perennial grass weed than a single application. Apply a 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 could reduce weed control. DO NOT APPLY if rainfall is expected within one hour as control may be reduced.

#### ADJUVANT OR CROP OIL CONCENTRATE

Alfalfa, Cotton, Dry Shelled Bean & Pea, Edible Podded Legume Vegetables, Peanuts (including perennial), Potato, Soybean, Succulent Bean & Pea, Sugar Beet and Sunflower: Always use a crop oil concentrate\* at 1.0 qt/A by ground or 1% v/v, but not less than 1 pt/A, in the finished spray volume by air. 1-to-2 qts/A liquid fertilizer (10-34-0, 28% N or 32% N) or an equivalent amount of spray grade ammonium sulfate (AMS) (2.5 to 4.0 lbs/A) can be added to Cleanse® 2EC applications 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, red rice, rhizome Johnsongrass, volunteer cereals, volunteer corn and wild oats.

\*Acceptable crop oil concentrates are those that contain a minimum of 80% oil and 15% emulsifier. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all the following criteria: (a) 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.

Asparagus, Canola, Carrot, Clover, Cranberry, Cucurbits, Flax, Fruiting Vegetables (except Tomato), Garden Beet, Garlic, Head & Stem Brassica Vegetables, Herbs, Hops, Leaf Petioles, Leafy Brassica Greens, Leafy Greens, Mint, Mustard Seed, Onion (Dry Bulb and Green), Root Vegetables, Safflower, Sesame, Shallots (Dry Bulb and Green), Strawberry, Sweet Potato (Yam and Other Tuberous and Corm Vegetables except Potato) and Tomato: Unless tank mix instructions indicate otherwise, always use a crop oil concentrate at 1% v/v in the finished spray volume. The addition of a liquid fertilizer is not recommended for these crops.

**Ornamental Plants and Non-Bearing Food Crops:** Add a nonionic surfactant containing at least 80% active ingredient at the rate of 1 pint per 50 gallons (0.25% v/v). The use of a crop oil concentrate is not recommended as it could injure flowers and foliage.

Conifer Trees, Fallow Land (and other non-producing agricultural areas), 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.

When an adjuvant is to be used with this product, Winfield Solutions, LLC recommends the use of a Council of Producers & Distributors of Agrotechnology certified adjuvant.

#### **GROUND APPLICATION**

To ensure complete coverage, it is essential to use sufficient spray volumes and pressure. Use a minimum of 5 gals. and a maximum of 40 gallons of spray solution per acre. A minimum of 10 gallons per acre is required under the following conditions: 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 gallons per acre under these conditions can result in poor coverage and reduced grass control requiring repeat application. Spray pressures should reflect a minimum of 30 psi and a maximum of 60 psi at the nozzle. Do not use flood nozzles.

Use a minimum application of 20 gallons of spray solution per acre for onions (dry bulbs and green), garlic and shallots (dry bulbs and green).

#### **AIR APPLICATION**

Use a minimum of 3 gallons of spray solution per acre unless otherwise directed in this label. If grass or crop foliage becomes dense, increase spray volumes up to 10 gallon.

For onions (dry bulbs and green), garlic or shallots (dry bulbs and green): Do not exceed 8 fl oz/A in a single application when applying by air. In California, use a minimum of 20 gals spray solution per acre, when applying by air to onions, garlic or shallots.

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

#### **Spot Treatment**

Mix ¼% to ½% (0.33 oz to 0.65 oz per gal) product when using hand sprayers or high volume sprayers utilizing hand guns. While not allowing runoff of spray solution, apply to wet vegetation. For uses requiring crop oil concentrate, include crop oil concentrate at 1% (1.3 oz per gal) by volume. For uses requiring nonionic surfactant, include nonionic surfactant at ¼% (0.33 oz per gal) by volume.

If Cleanse® 2EC is applied as a spot treatment, take care to not exceed the maximum rate allowed on a "per acre" basis.

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

This product may be applied to onions and garlic by sprinkler irrigation systems. Do not apply by chemigation to any other crop, or to this crop using any other type of irrigation system.

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

Make application of Cleanse® 2EC 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 the quantities of irrigation water specified above may result in decreased product performance by removing the chemical from the zone of effectiveness. Use a metering device to inject the Cleanse® 2EC into the irrigation water at a constant flow. Maintain constant agitation in the chemical supply tank during the entire period of herbicide application. Inject the product with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. Allow time for all lines to flush the herbicide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of remaining herbicide, a dye indicator may be injected into the lines to mark the end of the application period.

#### Restrictions

- DO NOT APPLY THIS PRODUCT BY CHEMIGATION IN THE STATES OF IDAHO, MONTANA, OREGON AND WASHINGTON.
- Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big qun, solid set, or hand move system(s). Do not apply this product through any other type of irrigation system.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **Precautions**

- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.
- A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### **Sprinkler Chemigation**

- 1. 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 back flow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. 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.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. 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.
- 6. 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.

#### **Chemigation Systems Connected to Public Water Systems**

- 1. 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.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.
- 4. The pesticide injection pipeline must 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.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. 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.

#### **CLEANSE® 2EC USE PRECAUTIONS**

- Tank mixes of Cleanse<sup>®</sup> 2EC and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs, an additional application of this product may be necessary.
- Control may be unsatisfactory if rain is expected within one hour of application.
- Applying a postemergence broadleaf herbicide within one day following application of Cleanse<sup>®</sup> 2EC may result in reduced grass control.
- Applying Cleanse<sup>®</sup> 2EC under conditions that do not promote active grass growth will reduce herbicide effectiveness.
   These conditions include, drought, excessive water, low humidity and extremes in temperature, and grasses either partially controlled or stunted from prior pesticide applications. Grasses under these kinds of stressful conditions will not absorb and translocate Cleanse<sup>®</sup> 2EC effectively, and will be less susceptible to herbicide activity.
- While all the vegetable crops on this label have been tested and are tolerant to Cleanse<sup>®</sup> 2EC, not all specialty varieties of these crops have been tested. Before applying Cleanse<sup>®</sup> 2EC to specialty varieties of vegetable crops on this label, it is advised that crop tolerance be investigated first using a small section of the field. It is possible that injury symptoms can occur. Symptoms may appear as leaf speckling or stunting.
- Optimal perennial grass control can be obtained if rhizomes or stolons are cut up by preplant tillage practices (disking, plowing, etc.) to stimulate maximum emergence of grass shoots. Cultural practices, such as continuous no-tillage in which the perennial grass rhizomes or stolons are not cut up, result in a very staggered, non-uniform weed emergence. Due to this non-uniform weed emergence, apply no fewer than two (2) Cleanse® 2EC applications per season 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 Cleanse<sup>®</sup> 2EC.

#### **CLEANSE® 2EC USE RESTRICTIONS**

- Refer to the Crop Specific Use Instructions for restrictions on:
  - Maximum single application rates
  - Maximum amount of product than may be applied per year
  - Number of applications allowed per year
  - Minimum spray intervals between applications
- Application on Long Island, New York, is restricted to no more than 16 fl. oz. (0.25 lb. ai) of Cleanse<sup>®</sup> 2EC per acre
  per year.
- Aerial applications for all tree fruits and tree nut uses are prohibited.
- The use of this product may pose a hazard to the federally designated endangered species of Solano Grass and Wild Rice. Use of this product is prohibited in the following areas where the species are known to exist:
  - Solano Grass: Solano County, California: The vernal lakes area bounded by the Union Pacific Railroad and Hastings Road to the north, Highway 113 to the east, Highway 12 to the south, and Travis Air Force Base to the west.
  - Wild Rice: Hays County, Texas
- Always read and follow label directions of all products. Always follow the most restrictive label language for all
  products whether used alone or in a tank mix. 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.
- This product is not to be used on vegetable crops being grown for seed production unless specific use directions are provided.

#### SPRAY DRIFT MANAGEMENT

#### SPRAY DRIFT

#### **Aerial Applications**:

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

#### **Ground Boom Applications:**

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

### **SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce drift potential 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.
- Nozzle Type Use a nozzle type 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

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 application in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSTIONS**

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

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

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

If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist, certified crop advisors, and/or Winfield Solutions, LLC representative for pesticide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.
- For further information or to report suspected resistance, contact your Winfield Solutions, LLC representative.

CROPS <sup>(1)</sup>	MINIMUM TIME FROM APPLICATION TO HARVEST (PHI)	USE RATES PER ACRE	CROP OIL CONCENTRA TE RATES PER ACRE <sup>(2)</sup>	SPECIAL USE INSTRUCTIONS/ RESTRICTIONS
Alfalfa including: Sainfoin Holy Clover Birdsfoot trefoil	15 days before grazing, feeding or harvesting (cutting) for forage or hay	6 – 16 fl. oz.	1 qt. by ground or 1% v/v, but not less than 1 pt/A, by air <sup>(3)</sup>	This product can be applied to seedling or established alfalfa grown for seed, hay, silage, green chop or direct grazing.  For weed control in established alfalfa, the minimum use rate is 10 fl. oz./A of Cleanse® 2EC.  Adding AMS has shown improved grass control for difficult to control species including: quackgrass, red rice, rhizome Johnsongrass, volunteer cereals, volunteer corn and wild oats.  RESTRICTIONS:  • Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application.  • Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year <sup>4</sup> .  • Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz/A (0.156 - 0.25 lb. ai/A) applications per year.  • Do not make repeat applications less than 14-days apart.  • Do not plant rotational crops until 30 days after application of Cleanse® 2EC.  • Do not apply Cleanse® 2EC 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.
Asparagus	1 day	6 – 8 fl. oz.	1% v/v in the finished spray volume.	<ul> <li>RESTRICTIONS:</li> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>

		SPECIFIC C	JSE INSTRUCTI	ONS FOR CLEANSE® 2EC
	MINIMUM		CDOD OIL	
	TIME FROM	HEE	CROP OIL	
	APPLICATION	USE	CONCENTRA	CRECIAL LICE INCERNICATIONS
CROPS <sup>(1)</sup>	TO HARVEST	RATES PER ACRE	TE RATES PER ACRE <sup>(2)</sup>	SPECIAL USE INSTRUCTIONS/ RESTRICTIONS
	(PHI)	6 – 16 fl.	1 qt. by ground	For reduced rate directions for the control of small annual
Beans, Dry Shelled including:	30 days	0 – 10 II. 0Z.	or 1% v/v, but	grasses, refer to the appropriate Table.
Bean ( <i>Lupinus</i> spp) Grain Sweet White			not less than 1 pt/A, by air <sup>(3)</sup>	Adding AMS has shown improved grass control for difficult to control species including; quackgrass, red rice, rhizome Johnsongrass, volunteer cereals, volunteer corn and wild oats.
White Sweet Bean (Phaseolus spp.) Field Kidney Lima (dry) Navy Pinto Tepary Bean (Vigna spp.) Adzuki Bean Black-eyed Pea Catjang Cowpea Crowder Pea Moth Bean Mung Bean Rice Bean Southern Pea Urd Bean Broad (dry) Chickpea (garbanzo) Guar Lablab Bean Lentil				<ul> <li>RESTRICTIONS:</li> <li>Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.</li> <li>For Reduced Rate Control for Small Annual Grasses: Do not exceed four applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Bean, Succulent including: Bean (Phaseolus spp.) Broad Bean (succulent) Lima (green) Bean (Vigna spp.) Black-eyed Pea Cowpea Southern Pea	21 days	6 – 8 fl. oz.	1 qt. by ground or 1% v/v, but not less than 1 pt/A, by air <sup>(3)</sup>	For reduced rate directions for the control of small annual grasses, refer to the appropriate Table.  Adding AMS has shown improved grass control for difficult to control species including; quackgrass, red rice, rhizome Johnsongrass, volunteer cereals, volunteer corn and wild oats.  RESTRICTIONS:  • Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.  • Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) per year.  • Do not apply more than one (1) application per acre per year , except as indicated below for Reduced Rate Control for Small Annual Grasses.  • For Reduced Rate Control for Small Annual Grasses: Do not exceed two 4 fl. oz./A (0.0625 lb. ai/A) applications per year. Do not make repeat applications less than 14-days apart.
Beet, Garden	30 days	6 – 8 fl. oz.	1% v/v in the finished spray volume	<ul> <li>RESTRICTIONS:</li> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>

		<u> </u>		ONS FOR CLEANSE <sup>®</sup> ZEC
	MINIMUM		CDOD O''	
	TIME FROM		CROP OIL	
	APPLICATION	USE	CONCENTRA	
00000(1)	TO HARVEST	RATES	TE RATES	SPECIAL USE INSTRUCTIONS/
CROPS <sup>(1)</sup>	(PHI)	PER ACRE	PER ACRE <sup>(2)</sup> 1% v/v in the	RESTRICTIONS  Crop injury could occur when this product is applied during the
Canola (Not for use in	70 days	4 – 6 fl. oz.	finished spray	bloom period.
California)			volume	Bloom portou.
- Camonna,				For reduced rate directions for the control of small annual
				grasses, refer to the appropriate Table.
				RESTRICTIONS:
				Do not apply after crop has begun bolting.
				Do not apply more than 6 fl. oz./A (0.09 lb. ai/A) in a single
				application.
				Do not exceed (1) one application per acre per year.
2 1	00.1	0 0 5	1% v/v in the	Do not exceed 6 fl. oz./A (0.09 lb. ai/A) per year.
Carrot	30 days	6 – 8 fl. oz.	finished spray	RESTRICTIONS:
			volume	<ul> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.</li> </ul>
				<ul> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> </ul>
				Do not exceed four applications per acre per year.
				Do not make repeat applications less than 14-days apart.
Clover	15 days before	6 – 16 fl.	1% v/v in the	RESTRICTIONS:
(For use on clover	grazing,	OZ.	finished spray volume	• Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single
grown in the states	feeding, or		volume	application.  • Do not exceed 16 fl. oz./A (0.25 lb. ai/A) per year.
of Idaho, Oregon and Washington	harvesting			• Do not exceed two 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A)
only.)	(cutting) for			applications per year or one (1) 8 - 16 fl. oz./A (0.125 - 0.25
	forage or hay			lb. ai./A) application per year.
	101490 01 1149			Do not make repeat applications less than 14-days apart.
Cotton	60 days	6 – 16 fl.	1 qt. by ground	Adding AMS has shown improved grass control for difficult to
		OZ.	or 1% v/v, but not less than 1	control species including; quackgrass, red rice, rhizome Johnsongrass, volunteer cereals, volunteer corn and wild oats.
			pt/A, by air <sup>(3)</sup>	
				RESTRICTIONS:
				Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application.
				<ul> <li>application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> </ul>
				• Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A)
				applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb.
				ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 -
				0.25 lb. ai/A) applications per year.
				<ul> <li>Do not make repeat applications less than 14-days apart.</li> <li>Do not graze treated fields or feed treated forage or hay to</li> </ul>
				livestock.
Cranberry	30 days	6 – 8 fl. oz.	1% v/v in the	RESTRICTIONS:
		5 5 11. 52.	finished spray	Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single
			volume	application.
				• Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year <sup>4</sup> .
				Do not exceed four applications per acre per year.  Per part reals a report applications less than 144 days a part.
				<ul> <li>Do not make repeat applications less than 14-days apart.</li> <li>Do not apply between the "hook" stage and full fruit set.</li> </ul>
Cucurbits,	14 days	6 – 8 fl. oz.	1% v/v in the	RESTRICTIONS:
including:	14 uays	0 - 0 11. 02.	finished spray	Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single
Chayote (fruit)			volume	application.
Chinese Wax Gourd				• Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year <sup>4</sup> .
Citron Melon Cucumber				Do not exceed four applications per acre per year.
Gherkin				Do not make repeat applications less than 14-days apart.
Gourd, Edible				
Muskmelons (all)				
including:				

		SPECIFIC U	SE INSTRUCTI	UNS FUR CLEANSE® ZEC
CROPS <sup>(1)</sup>	MINIMUM TIME FROM APPLICATION TO HARVEST (PHI)	USE RATES PER ACRE	CROP OIL CONCENTRA TE RATES PER ACRE <sup>(2)</sup>	SPECIAL USE INSTRUCTIONS/ RESTRICTIONS
Cantaloupes Honeydew Melon Pumpkins Squash (all) Watermelon	(FAI)	PER AGRE	PER AGRE	RESTRICTIONS
Fallow Land  Conifer Trees (and other non-producing agricultural areas)  Non-Crop or Non-Planted areas	N/A	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.	See the "FALLOW LAND", "CONIFER TREES", and "NON-CROP or NON-PLANTED AREAS" sections of this label for additional information.  RESTRICTIONS:  • Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application.  • Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year <sup>4</sup> .  • Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.  • Do not make repeat applications less than 14-days apart.  • Do not plant any crop for 30 days following application unless clethodim is registered for use on that crop.
Flax (Not for use in California)	60 days	6 – 8 fl. oz.	1% v/v in the finished spray volume	<ul> <li>Make application prior to bloom. If applied during bloom, crop injury could occur.</li> <li>For reduced rate directions for the control of small annual grasses, refer to the appropriate Table.</li> <li>RESTRICTIONS: <ul> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.</li> <li>Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) per year.</li> <li>Do not exceed two applications per acre per year, except as indicated below for Reduced Rate Control for Small Annual Grasses.</li> <li>For Reduced Rate Control for Small Annual Grasses: Do not exceed four applications at 4 fl. oz./A (0.0625 lb. ai/A) per year or three applications at 5 fl. oz./A (0.078 lb. ai/A) per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul> </li> </ul>
Fruiting Vegetables (except Tomato) including: Eggplant Groundcherry Pepino Peppers (all) Tomatillo	20 days	6 – 8 fl. oz.	1% v/v in the finished spray volume	<ul> <li>RESTRICTIONS:</li> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Head & Stem Brassica Vegetables, including: Broccoli Cabbage Cauliflower Brussels Sprouts	30 days	6 – 8 fl. oz.	1% v/v in the finished spray volume	PESTRICTIONS: Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application. Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year <sup>4</sup> . Do not exceed four applications per acre per year. Do not make repeat applications less than 14-days apart.

		SFECII IC C	JOL INGTRUCTI	ONS FOR CLEANSE® 2EC
	MINIMUM			
	TIME FROM		CROP OIL	
	APPLICATION	USE	CONCENTRA	
	TO HARVEST	RATES	TE RATES	SPECIAL USE INSTRUCTIONS/
CROPS(1)	(PHI)	PER ACRE	PER ACRE(2)	RESTRICTIONS
Herbs including: Angelica Balm	14 days	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.
Basil Borage Burnet Chamomile Catnip Chervil, (dried) Chive Chinese chive				Crop tolerance should be verified to this product on a small area of the herb crop, at the desired 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 same rate tested and with the same crop oil used in the tolerance test.
Clary Coriander (leaf) Costmary Cilantro (leaf) Curry (leaf) Dill (dillweed) Horehound Hyssop Lavender Lovage (leaf) Marigold Marjoram (origanum spp) Nasturtium				<ul> <li>RESTRICTIONS:</li> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Parsley (dried) Pennyroyal Rosemary Rue Sage Savory, Summer and Winter				
Hops	21 days	6 – 8 fl. oz.	1% v/v in the finished spray volume	RESTRICTIONS:              On ond apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.             On ond apply more than 32 fl. oz./A (0.50 lb. ai/A) per year <sup>4</sup> .             On ond exceed four applications per acre per year.             On ond make repeat applications less than 14-days apart.
Leaf Petioles including: Celery Cardoon Chinese celery Celtuce Florence fennel Rhubarb Swiss chard	30 days	6 – 8 fl. oz.	1% v/v in the finished spray volume	<ul> <li>RESTRICTIONS:</li> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>

	_	SPECIFIC U	SE INSTRUCTI	ONS FOR CLEANSE® 2EC
	MINIMUM			
	TIME FROM		CROP OIL	
	APPLICATION	USE	CONCENTRA	
	TO HARVEST	RATES	TE RATES	SPECIAL USE INSTRUCTIONS/
CROPS <sup>(1)</sup>	(PHI)	PER ACRE	PER ACRE(2)	RESTRICTIONS
Leafy Brassica	14 days	6 – 8 fl. oz.	1% v/v in the	RESTRICTIONS:
Greens, including:			finished spray volume	• Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single
Broccoli Raab			volume	application.
Cabbage,				<ul> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four applications per acre per year.</li> </ul>
Chinese (Bok				<ul> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Choy)				Do not make repeat applications less than 14-days apart.
Collards				
Kale				
Mizuna				
Mustard Greens				
Mustard Spinach				
Rape Greens				
Leafy Greens	14 days	6 – 8 fl. oz.	1% v/v in the	RESTRICTIONS:
including:			finished spray	Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single
Amaranth Chinese Spinach			volume	application.
Leafy Amaranth				<ul> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four applications per acre per year.</li> </ul>
Tampala				<ul> <li>Do not exceed four applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Arugula (roquette)				• Do not make repeat applications less than 14-days apart.
Chervil Chrysanthemum				
edible-leaved				
Corn Salad				
Cress Garden				
Yellow rock				
Winter				
Dandelion Dock (sorrel)				
Endive (escarole)				
Lettuce (head and leaf)				
Orach				
Parsley Purslane				
Garden				
Winter				
Radicchio (red chicory) Spinach				
New Zealand				
Vine (Indian and				
malabar) Legume	04 d	C 0.fl	1% v/v in the	For reduced rate directions for the control of small annual
Vegetables, Edible	21 days	6 – 8 fl. oz.	finished spray	grasses, refer to the appropriate Table.
Podded including:			volume	
Bean (Phaseolus spp.)				Adding AMS has shown improved grass control for difficult to
Runner				control species including; quackgrass, red rice, rhizome Johnsongrass, volunteer cereals, volunteer corn and wild oats.
Snap Wax				Johnsongrass, volunteer cereals, volunteer com and wild bats.
Bean (Vigna spp.)				RESTRICTIONS:
Asparagus				• Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single
Chinese Longbean Moth				application.
Yardlong				• Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) per year.
Jackbean				Do not apply more than one (1) application per acre per year, except as indicated below for Reduced Rate Control
Pea (Pisum spp.) Dwarf				for Small Annual Grasses.
Edible-pod				For Reduced Rate Control for Small Annual Grasses: Do not
Snow				exceed two 4 fl. oz./A (0.0625 lb. ai/A) applications per year.
Sugar Snap				Do not make repeat applications less than 14-days apart.
Pigeon Sword Bean				• For peas apply before bloom, but no later than 21 days
. =	<u> </u>			before harvest.

CROPS <sup>(1)</sup>	MINIMUM TIME FROM APPLICATION TO HARVEST (PHI)	USE RATES PER ACRE	CROP OIL CONCENTRA TE RATES PER ACRE <sup>(2)</sup>	SPECIAL USE INSTRUCTIONS/ RESTRICTIONS
Mint	21 days	6 – 16 fl. oz.	1 qt by ground or 1% v/v, but not less than 1 pt/A, by air	The minimum use rate is 10 fl. oz./A for weed control.  RESTICTIONS:  • Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application.  • Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year <sup>4</sup> .  • Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.  • Do not make repeat applications less than 14-days apart.
Mustard Seed (Not for use in California)	75 days	4 – 6 fl. oz.	1% v/v in the finished spray volume	If applied during the bloom period, crop injury could occur.  For reduced rate directions for the control of small annual grasses, refer to the appropriate Table.  RESTRICTIONS:  • Do not apply more than 6 fl. oz./A (0.09 lb. ai/A) in a single application.  • Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) per year.  • Do not exceed two 6 fl. oz./A (0.09 lb. ai/A) applications per year, three 5 fl. oz/A (0.078 lb. ai/A) applications per year, or four 4 fl. oz./A (0.0625 lb. ai/A) applications per year.  • Do not make repeat applications less than 14-days apart.  • Do not apply after crop has begun bolting.

	1	SPECIFIC U	ISE INSTRUCTI	ONS FOR CLEANSE® 2EC
	MINIMUM			
	TIME FROM		CROP OIL	
	APPLICATION	USE	CONCENTRA	
	TO HARVEST	RATES	TE RATES	SPECIAL USE INSTRUCTIONS/
CROPS <sup>(1)</sup>	(PHI)	PER ACRE	PER ACRE(2)	RESTRICTIONS
Onions	45 days	6 – 16 fl.	1% v/v in the	Minimum 20 gals/A spray volume by ground in entire U.S.
(Dry Bulbs Only)  Garlic		OZ.	finished spray volume	Minimum 20 gals/A spray volume by air in California
Shallots (Dry Bulbs Only)				States Other than California: Make applications by air to onions, garlic or shallots in a minimum of 10 gals/A.
(Dry Duibs Only)				In California, do not apply Cleanse® 2EC to onions, garlic, or shallots until the crop has at least two full leaves.
				In California, 14 day spray intervals are necessary between the application of Cleanse <sup>®</sup> 2EC and liquid nitrogen or other herbicide applications. Injury to crop may occur when shorter intervals are observed.
				If Cleanse <sup>®</sup> 2EC is applied as a spot treatment to onions, garlic, or shallots, do not exceed the maximum rate allowed on a "per acre" basis.
				RESTRICTIONS: Shallot (Dry Bulb)  For air and ground applications, do not exceed 8 fl. oz./A (0.125 lb. ai/A) in a single application.  Do not exceed 2 applications per acre per year.  Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) per year.  Do not make repeat applications less than 14-days apart.  Garlic  For air and ground applications, do not exceed 8 fl. oz./A (0.125 lb. ai/A) in a single application. Do not exceed two applications per acre per year. Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) per year.  For chemigation applications, do not exceed 16 fl. oz./A (0.25 lb. ai/A) in a single application. Do not exceed two applications per acre per year. Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year <sup>4</sup> .  Do not make repeat applications less than 14-days apart.  Onion (Dry Bulb)
				<ul> <li>For ground and chemigation applications, do not exceed 16 fl. oz./A (0.25 lb. ai/A) in a single application. Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.</li> <li>For air applications, do not exceed 8 fl. oz./A (0.125 lb. ai/A) in a single application. Do not exceed four applications per acre per year. In California, for air applications, do not exceed 2 applications per year.</li> <li>Do not exceed 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>

		SPECII IC C	SE INSTRUCTI	UNS FOR CLEANSE® ZEC
	MINIMUM			
	TIME FROM		CROP OIL	
	APPLICATION	USE	CONCENTRA	
27.7.7(4)	TO HARVEST	RATES	TE RATES	SPECIAL USE INSTRUCTIONS/
CROPS <sup>(1)</sup>	(PHI)	PER ACRE	PER ACRE <sup>(2)</sup>	RESTRICTIONS
Onions, Green,	14 days	6 – 8 fl. oz.	1% v/v in the finished spray	Minimum 20 gals/A spray volume by ground in entire U.S.
including:			volume	Minimum 20 gals/A spray volume by air in California
Leeks			Volumo	States Other than California: Make applications by air to onions
Scallions or Spring				in a minimum of 10 gals/A.
Onions				In California, do not apply Cleanse® 2EC to onions until the crop
Japanese				has at least two full leaves.
Bunching Onions				In California, 14 day spray intervals are necessary between the
Green Shallots Green Eschalots				application of Cleanse <sup>®</sup> 2EC and liquid nitrogen or other herbicide applications. Injury to crop may occur when shorter intervals are observed.
				If Cleanse <sup>®</sup> 2EC is applied as a spot treatment to onions, do not exceed the maximum rate allowed on a "per acre" basis.
				RESTRICTIONS:     Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.
				<ul> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four applications per acre per year.</li> </ul>
0	NI/A	0 40 5	Use of crop oil	Do not make repeat applications less than 14-days apart.  Add a nonionic surfactant containing at least 80% active
Ornamentals	N/A	6 – 16 fl. oz.	concentrate is	ingredient at the rate of 1 pt per 50 gallons (0.25% v/v.)
			recommended as injury to flower and	If Cleanse <sup>®</sup> 2EC is applied as a spot treatment to non-bearing food crops do not exceed the maximum rate allowed on a "per acre" basis.
			foliage may occur. See	See the ORNAMENTALS and NON-BEARING FOOD CROPS sections of this label for further information.
Non-Bearing Food	N/A	6 – 8 fl. oz.	Special Use Instructions	RESTRICTIONS:
Crops			Instructions	Must not be applied to non-bearing fruit or nut crops which
				are grown for root stock.
				<ul> <li>Sugar Maples cannot be tapped for syrup within one year of application.</li> </ul>
				Do not make aerial applications to tree fruits and tree nuts.
				• For ornamentals, do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application. Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.
				<ul> <li>For non-bearing food crops, do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application. Do not exceed four applications per acre per year.</li> </ul>
				<ul> <li>For ornamentals and non-bearing food crops, do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Pea, Dry Shelled	30 days	6 – 8 fl. oz.	1 qt by ground	Apply before bloom. Applications of Cleanse® 2EC to peas
including:	Journal of Garage	3 0 11. 02.	or 1% v/v, but	during the bloom period could result in severe crop injury,
Pea (Pisum spp.)			not less than 1	including loss of yield and delayed maturity.
Field Pigeon			pt/A, by air <sup>(3)</sup>	For reduced rate directions for the control of small annual grasses, refer to the appropriate Table.
Š				Adding AMS has shown improved grass control for difficult to control species including; quackgrass, red rice, rhizome Johnsongrass, volunteer cereals, volunteer corn and wild oats.

		SPECIFIC U	ISE INSTRUCTI	ONS FOR CLEANSE® 2EC
	MINIMUM		0000000	
	TIME FROM		CROP OIL	
	APPLICATION	USE	CONCENTRA	
2 - 2 - 2 (4)	TO HARVEST	RATES	TE RATES	SPECIAL USE INSTRUCTIONS/
CROPS <sup>(1)</sup>	(PHI)	PER ACRE	PER ACRE <sup>(2)</sup>	RESTRICTIONS
				RESTRICTIONS:
				<ul> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.</li> </ul>
				Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) per year.
				• Do not apply more than one (1) application per acre per
				year, except as indicated below for Reduced Rate Control
				for Small Annual Grasses.
				For Reduced Rate Control for Small Annual Grasses: Do not
				exceed two 4 fl. oz./A (0.0625 lb. ai/A) applications per year.  Do not make repeat applications less than 14-days apart.
				• For peas apply before bloom, but no later than 30 days
				before harvest.
Pea, Succulent	21 days	6 – 8 fl. oz.	1 qt by ground	Apply before bloom. Applications of this product to peas during
including:			or 1% v/v, but	the bloom period could result in severe crop injury, including
Pea (Pisum spp.)			not less than 1	loss of yield and delayed maturity.
English Pea			pt/A, by air <sup>(3)</sup>	For reduced rate directions for the control of small annual
Garden Pea				grasses, refer to the appropriate Table.
Green Pea				Adding AMS has shown improved grass control for difficult to
Pigeon Pea				control species including; quackgrass, red rice, rhizome
				Johnsongrass, volunteer cereals, volunteer corn and wild oats.
				RESTRICTIONS:
				Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single
				application.
				<ul> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) per year.</li> <li>Do not apply more than one (1) application per acre per</li> </ul>
				year, except as indicated below for Reduced Rate Control
				for Annual Grasses.
				For Reduced Rate Control for Small Annual Grasses: Do not
				exceed two 4 fl. oz./A (0.0625 lb. ai/A) applications per year.
				Do not make repeat applications less than 14-days apart.  • For peas apply before bloom, but no later than 21 days
				before harvest.
Peanut (including	40 days	6 – 16 fl.	1 qt by ground	Adding AMS has shown improved grass control for difficult to
perennial)		oz.	or 1% v/v, but	control species including; quackgrass, red rice, rhizome
,			not less than 1	Johnsongrass, volunteer cereals, volunteer corn and wild oats.
			pt/A, by air <sup>(3)</sup>	If applying for harvest efficiency see Directions for Grass
				Suppression for Harvest Efficiency in Peanut with Cleanse®
				2EC.
				RESTRICTIONS:
				Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single
				application.
				• Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year <sup>4</sup> .
				• Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A)
				applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb.
				ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.
				Do not make repeat applications less than 14-days apart.
				• Do not make repeat applications less than 14-days apart.

	MINIMUM TIME FROM APPLICATION TO HARVEST	USE RATES	CROP OIL CONCENTRA TE RATES	SPECIAL USE INSTRUCTIONS/
CROPS <sup>(1)</sup>	(PHI)	PER ACRE	PER ACRE(2)	RESTRICTIONS
Potato	30 days	6 – 16 fl. oz.	1 qt by ground or 1% v/v, but not less than 1 pt/A, by air <sup>(3)</sup>	<ul> <li>Adding AMS has shown improved grass control for difficult to control species including; quackgrass, red rice, rhizome Johnsongrass, volunteer cereals, volunteer corn and wild oats.</li> <li>RESTRICTIONS: <ul> <li>Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul> </li> </ul>
Radish	15 days	6 – 8 fl. oz.	1% v/v in the finished spray volume	<ul> <li>RESTRICTIONS:</li> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.</li> <li>Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) per year.</li> <li>Do not exceed two applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Root Vegetables (except Radish), including: Chicory Ginseng Horseradish Turnip	30 days	6 – 8 fl. oz.	1% v/v in the finished spray volume	<ul> <li>RESTRICTIONS:</li> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Safflower	70 days	6 – 8 fl. oz.	1% v/v in the finished spray volume	PESTRICTIONS:  Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.  Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year <sup>4</sup> .  Do not exceed four applications per acre per year  Do not make repeat applications less than 14-days apart.
Sesame	14 days	6 – 8 fl. oz.	1% v/v in the finished spray volume	<ul> <li>RESTRICTIONS:</li> <li>Do not apply during flowering.</li> <li>Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>

				ONS FOR CLEANSE® 2EC
	MINIMUM			
	TIME FROM		CROP OIL	
	APPLICATION	USE	CONCENTRA	
	TO HARVEST	RATES	TE RATES	SPECIAL USE INSTRUCTIONS/
CROPS <sup>(1)</sup>	(PHI)	PER ACRE	PER ACRE(2)	RESTRICTIONS
Soybean	60 days	6 – 16 fl oz	1 qt by ground or 1% v/v (but not less than 1	Refer to appropriate Table for reduced rate directions for the control of small annual grasses.
			pt/A) by air <sup>(3)</sup>	Adding AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, volunteer cereals, volunteer corn and wild oats.
				RESTRICTIONS:     Do not graze treated fields or feed treated forage or hay to livestock.     Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application.
				<ul> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.</li> <li>For Reduced Rate Control for Small Annual Grasses: Do not exceed four application per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Strawberry	4 days	6 – 8 fl oz	1% v/v in the finished spray volume	RESTRICTIONS:  • Do not apply more than 8 fl. oz./A (0.125 lb.ai/A) in a single
			Volume	<ul> <li>application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Sugar Beet	40 days	6 – 16 fl oz	1 qt by ground or 1% v/v, but	Refer to the appropriate Table for reduced rate directions for the control of small annual grasses.
			not less than 1 pt/A, by air <sup>(3)</sup>	Adding AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, volunteer cereals, volunteer corn and wild oats.
				<ul> <li>RESTRICTIONS:</li> <li>Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.</li> <li>For Reduced Rate Control for Small Annual Grasses: Do not exceed four applications per acre per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>

	MINIMUM TIME FROM APPLICATION TO HARVEST	USE RATES	CROP OIL CONCENTRA TE RATES	SPECIAL USE INSTRUCTIONS/
CROPS <sup>(1)</sup>	(PHI)	PER ACRE	PER ACRE(2)	RESTRICTIONS
Sunflower	70 days	6 – 16 fl oz	1 qt by ground or 1% v/v, but not less than 1 pt/A, by air <sup>(3)</sup>	<ul> <li>Adding AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, volunteer cereals, volunteer corn and wild oats.</li> <li>RESTRICTIONS: <ul> <li>Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per season<sup>4</sup>.</li> <li>Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul> </li> </ul>
Sweet Potato, Yam and other tuberous and corm	30 days	6 – 16 fl oz	1% v/v in the finished spray volume	Adding AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, volunteer cereals, volunteer corn and wild oats.
vegetables (except Potato), including: Artichoke Chinese Jerusalem Cassava Bitter Sweet Ginger				<ul> <li>RESTRICTIONS:</li> <li>Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Tomato	20 days	6-16 fl oz	1% v/v in the finished spray volume	<ul> <li>RESTRICTIONS:</li> <li>Do not apply more than 16 fl. oz./A (0.25 lb. ai/A) in a single application.</li> <li>Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year<sup>4</sup>.</li> <li>Do not exceed four 6 - 8 fl. oz./A (0.09 - 0.125 lb. ai/A) applications per year, three 8 - 10 fl. oz./A (0.125 - 0.156 lb. ai/A) applications per year or two 10 - 16 fl. oz./A (0.156 - 0.25 lb. ai/A) applications per year.</li> <li>Do not make repeat applications less than 14-days apart.</li> </ul>
Turnip Greens	14 days	6 – 8 fl oz	1% v/v in the finished spray volume	PESTRICTIONS:  Do not apply more than 8 fl. oz./A (0.125 lb. ai/A) in a single application.  Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year <sup>4</sup> .  Do not exceed four applications per acre per year.  Do not make repeat applications less than 14-days apart.

N/A - Not Applicable

- (1) Cleanse® 2EC is not for use on vegetable crops being grown for seed production unless specific use directions are provided.
- (2) Acceptable crop oil concentrates would be those that contain a minimum of 80% oils and 15% emulsifier. The crop oil concentration must contain either a petroleum or vegetable oil base and meet all the following criteria: a) contain only EPA-exempt ingredients, b) be non-phytotoxic, c) provides good mixing quality and d) be successful in local experience. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oil. For further information see the "ADJUVANT OR CROP OIL CONCENTRATE" section.
- (3) In addition to the recommended rate of crop oil concentrate, 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 the Cleanse® 2EC application.
- (4) Application on Long Island, New York, is restricted to no more than 16 fl. oz./A of Cleanse® 2EC (0.25 lb. ai/A) per year, adjust the maximum number of applications allowed per year accordingly.

#### **ATTENTION**

Plant tolerance to Cleanse<sup>®</sup> 2EC at labeled rates has been found to be acceptable for the indicated genera and species listed below. Due to variability within species, crop growth stage, environmental conditions, and application techniques, it is recommended that the user determine if the herbicide can be used safely on a few plants prior to widespread application. Neither the seller nor the manufacturer of Cleanse<sup>®</sup> 2EC have investigated the safety factor to plants not listed on this label.

#### **NON-BEARING FOOD CROPS**

If Cleanse® 2EC is improperly applied, crop injury to non-bearing fruit and nut crops can occur. Do not apply Cleanse® 2EC directly over the top of these plant types. Rather, direct the 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 following an application of Cleanse® 2EC.

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

#### **CONIFER TREES**

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

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

#### **NON-CROP OR NON-PLANTED AREAS**

The following areas are considered non-crop or non-planted areas:

Rights-of-way, including railroads, highways, roads, dividers, medians, pipelines, public utility lines, pumping stations, transformer stations and substations; around airports; electric utilities; commercial buildings; manufacturing plants; storage yards; rail yards; fence lines; parkways; post-harvest croplands; and beneath greenhouse benches and around golf courses.

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

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

#### **RESTRICTIONS:**

- Do not exceed the maximum rate per application listed in Crop Specific Use Directions.
- Do not exceed the maximum number of applications per year listed in Crop Specific Use Directions.
- Do not exceed the maximum yearly rate listed in Crop Specific Use Directions.
- Follow any other application restrictions indicated in the Crop Specific Use Directions.

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* (inches)	RATE FL OZ/ ACRE	HIGH RATE <sup>(4)</sup> FL OZ/ACRE
Barnyardgrass	Echinochloa crus-galli	2 to 8	6	8
Broadleaf Signalgrass	Brachiaria platyphylla	2 to 6	6	8
Brome				
California	Bromus carinatus	2 to 6	6	8
Cheat	Bromus secalinus	2 to 6	6	8
Downy	Bromus tectorum	2 to 6	6	8
Ripgut	Bromus diandrus	2 to 6	6	8
Canarygrass	Phalaris canariensis	1 to 4	6	8
Crabgrass	•		*	
Hairy	Digitaria adscendens	2 to 6**	6	8
Large	Digitaria sanguinalis	2 to 6**	6	8
Smooth	Digitaria ischaemum	2 to 6**	6	8
Southern	Digitaria ciliaris	2 to 6**	6	8
Crowfootgrass	Dactyloctenium aegyptium	2 to 6**	6	8
Fall Panicum	Panicum dichotomiflorum	2 to 8	6	8
Field Sandbur	Cenchrus incertus	2 to 6	6	8
Foxtail		•	•	1
Giant	Setaria faberi	2 to 12	6	8
Green	Setaria viridis	2 to 8	6	8
Yellow	Setaria glauc	2 to 8	6	8
Goosegrass	Eleusine indica	2 to 6**	6	8
Itchgrass	Rottboellia cochinchinensis	2 to 6	6	8
Junglerice	Echinochloa colona	2 to 6	6	8
Lovegrass (Stinkgrass)	Eragrostis cilianensis	2 to 6	6	8
Rabbitsfootgrass	Polypogon monspeliensis	1 to 4	6	8
Red Rice	Oryza sativa	1 to 3	6	8
Ryegrass			*	
Hardy	Lolium remotum	2 to 6	6	8
Italian	Lolium multiflorum	2 to 6	6	8
Seedling Johnsongrass	Sorghum halepense	4 to 10	6	8
Shattercane	Sorghum bicolor	6 to 18	6	8
Southwestern Cupgrass	Eriochloa gracilis	2 to 6	6	8
Sprangle top			*	
Amazon	Leptochloa panicoides	2 to 6	6	8
Bearded	Leptochloa fascicularis	2 to 6	6	8
Mexican	Leptochloa uninervia	2 to 6	6	8
Red	Leptochloa filiformis	2 to 6	6	8
Texas Panicum	Panicum texanum	2 to 6	6	8
Volunteer Cereals <sup>(3)</sup>		•	-	•
Barley	Hordeum vulgare	2 to 6	6	8
Oats	Avena sativa	2 to 6	6	8

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* (inches)	RATE FL OZ/ ACRE	HIGH RATE <sup>(4)</sup> FL OZ/ACRE
Rye	Secale cereale	2 to 6	6	8
Wheat	Triticum aestivum	2 to 6	6	8
Volunteer Corn <sup>(2)</sup>	Zea mays	4 to 12	4	6
Volunteer Corn (S.R.) <sup>(1)</sup>	Zea mays	4 to 12	8 (suppressi	on only)
Volunteer Corn <sup>(2)</sup>	Zea mays	12 to 24	6	8
Volunteer Grain Sorghum	Sorghum bicolor	8 to 12	6	8
Wild Oats	Avena fatua	2 to 6	6	8
Wild Proso Millet	Panicum miliaceum	2 to 10	6	8
Witchgrass	Panicum capillare	2 to 8	6	8
Woolly Cupgrass	Eriochloa villosa	2 to 8	6	8

<sup>\*</sup> Generally occurs between 3-leaf stage and tillering.

- (1) Sethoxydim resistant volunteer corn.
- (2) Includes Roundup Ready®, Liberty Link®, and IMI-CORN® volunteer corn
- (3) The minimum Cleanse® 2EC use rate for control when a cereal grain crop (such as wheat) is interseeded for crop establishment or is planted as wind breaks to aid crop establishment is 8 fl oz/A.
- (4) Where experience has shown that higher rates are needed for satisfactory control of annual grasses, rates higher than 8 fl oz/A may be applied in certain geographic areas, cropping situations, or environmental conditions. In these situations, rates from 8 to 16 fl oz/A can be applied.

# DIRECTIONS FOR ANNUAL & PERENNIAL GRASS CONTROL IN ESTABLISHED ALFALFA AND MINT WITH CLEANSE® 2EC

GRASS SPECIES	WEED STAGE	RATE	HIGH
		FL OZ/	RATE
		ACRE	FL OZ/ACRE
Annual & perennial Grasses Listed in Grass Table	See Table	10	16

**Mowing:** Achieving the best control of annual grasses can be made by applying Cleanse<sup>®</sup> 2EC before grass weeds are mowed. Once grass is mowed it becomes tougher to control, as much of the available leaf surface has been removed. In areas without a killing frost, some annuals can over-winter after having been mowed multiple times. These grasses form large crowns and may contain many viable buds. Even though these grasses may be an annual grass, they may require repeated application of Cleanse<sup>®</sup> 2EC for partial or complete control.

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

Aerial Application: When applying by air in established alfalfa and mint, apply Cleanse<sup>®</sup> 2EC in a minimum of 10 GPA

Annual Grass Control: Make application at the grass sizes and rates specified in the Directions for Annual Grass Table.. If a grass has been cut, make application after active growth has resumed and regrowth has reached the minimum height and before it reaches the maximum height indicated. Make application 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 Cleanse<sup>®</sup> 2EC may vary from region to region. In addition, some annuals germinate over an extended period of time and because control of small grasses is desired, application after each weed flush may be required. As a general rule spray spring and summer-germinating grasses as early in the season as possible, after initial green-up. Spray fall-germinating weeds in the fall soon after they begin growing but before any damage is done due to frost. Late fall applications may be less effective due to environmental conditions, such as frost, slower plant growth, or the onset of flowering.

**Perennial Grass Control:** Cleanse<sup>®</sup> 2EC 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.

<sup>\*\*</sup> Length of lateral growth.

DIRECTIONS FOR ANNUAL BLUEGRASS CONTROL WITH CLEANSE® 2EC					
GRASS SPECIES	WEED STAGE	RATE FL/OZ ACRE	HIGH RATE FL/OZ ACRE		
Annual Bluegrass (Poa annua)	to 4-leaf	6*	16		

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

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

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

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

\*Use a minimum of 10 ft oz/A to control annual bluegrass in seedling and established alfalfa and mint.

# DIRECTIONS FOR REDUCED RATE USE IN CANOLA, DRY SHELLED BEAN & PEA (INCLUDING SOYBEAN), EDIBLE PODDED LEGUME VEGETABLES, FLAX, MUSTARD SEED, SUCCULENT BEAN & PEA AND SUGAR BEET

# REDUCED RATE DIRECTIONS FOR SMALL ANNUAL GRASSES (NOT FOR USE IN CALIFORNIA)

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

#### **RESTRICTIONS:**

- Do not exceed the rates as specified in the chart per single application.
- Do not exceed the maximum number of applications per year listed in Crop Specific Use Directions.
- Follow any additional application restrictions indicated in the Crop Specific Use Directions.

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

<sup>\*</sup>Length of lateral growth

<sup>\*\*</sup>Not S.R. Corn

<sup>1</sup> Always add a crop oil concentrate at 1 gt./A by ground application to the finished spray volume.

#### **DIRECTIONS PERENNIAL GRASSES**

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

#### **RESTRICTIONS:**

- Do not exceed the maximum rate per application listed in Crop Specific Use Directions.
- Do not exceed the maximum number of applications per year listed in Crop Specific Use Directions.
- Do not exceed the maximum yearly rate listed in Crop Specific Use Directions.
- Follow any additional application restrictions indicated in the Crop Specific Use Directions.

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

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

#### **TANK MIXES**

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

- Geographic restrictions all products are not registered for use in all areas and rates may vary from one region of labeled use to another
- Crop rotation restrictions may differ
- Applicator certification requirements
- Worker safety rules, i.e., personal protective equipment (PPE), reentry time, posting
- Soil characteristics or soil type, e.g. pH, OM
- Number of applications and or maximum dosage per season
- Rain free period required or
- Application timing, e.g. pre-harvest interval
- Total yearly rates not to be exceeded.

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

# TANK MIX APPLICATION OF CLEANSE® 2EC AND BROADLEAF HERBICIDES FOR CONTROL OF GRASSES AND BROADLEAF WEEDS

- Make application only to actively growing grass and broadleaf weeds at the height or growth stage listed on each label
- Make application when the first grass or broadleaf weed species in a mixed population reaches the specified height or growth stage for treatment.
- Make application under favorable soil moisture and humidity that exist a few days after rainfall or within seven (7) days after irrigation.
- Always add the appropriate adjuvant to the spray mix at the labeled rate for each specific tank mix combination.
- Tank mix application can sometimes result in reduced grass control and possible increases in crop injury as compared to either product used alone. If regrowth occurs or an additional flush of new grass emerges, apply a second application of Cleanse® 2EC as specified in the respective size and rate tables.
- Do not tank mix Cleanse<sup>®</sup> 2EC when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.

#### **MIXING INSTRUCTIONS**

- 1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water. While agitating, add the correct amount of Cleanse<sup>®</sup> 2EC, making sure that agitation makes a rippling or rolling action on the water surface.
- 2. When 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 operation.
- 3. Add any required adjuvants (crop oil concentrate, nonionic surfactant and/or nitrogen solution.).
- 4. 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 conducting a jar test.

#### **ANTAGONISM INFORMATION**

Tank mixes of Cleanse<sup>®</sup> 2EC with postemergence broadleaf herbicides have shown some reduction or failure to control certain grass species, which would have otherwise been controlled by Cleanse<sup>®</sup> 2EC alone. Activity of the postemergence broadleaf herbicide in the tank mix is not affected.

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

(See tables above for specific grasses and growth stages) APPLICATION RATES/ACRE1 PRODUCT<sup>2</sup> **ANNUAL GRASSES** PERENNIAL GRASSES **CROP OIL** CONCENTRATE<sup>3</sup> **GROUND** AIR 10 – 16 fl oz CLEANSE® 2EC 10 – 16 fl oz 1% 1% 2,4-DB4 See 2,4-DB label See 2.4-DB label CLEANSE® 2EC 10 - 16 fl oz1% 1% PURSUIT DG5 1.08 - 2.16 oz OR OR

PURSUIT⁵	3 TO 6 fl oz			
CLEANSE® 2EC	10 – 16 fl oz			
+	+			
BUCTRIL® 2L6	1.0 - 1.5 pts	-	0.5%	0.5%
OR	or			
BUCTRIL GEL <sup>6,7</sup>	0.5 – 0.75 pt			

- 1 If grass regrowth occurs or an additional flush of new grass emerges, apply a second application of Cleanse® 2EC alone without a tank mix herbicide, according to the appropriate 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 recommended 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 Cleanse® 2EC plus 2,4-DB may increase the severity of crop injury when tank mixed. Alfalfa plants will generally outgrow this temporary crop injury within a few weeks.
- Before using this tank mix, read and understand the PURSUIT or PURSUIT DG labels for geographical restrictions and restrictions regarding alfalfa growth stage and type. Failure to do so can result in crop injury to alfalfa. DO NOT feed, graze or harvest alfalfa for 30 days following an application of PURSUIT to alfalfa.
- States of Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming and the western halves of Kansas, Nebraska, North Dakota, South Dakota: The tank mix of Cleanse® 2EC plus BUCTRIL or BUCTRIL GEL must be applied in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 2 trifoliate. Unacceptable crop injury can occur to alfalfa seedlings less than the 2 trifoliate leaf stage. BUCTRIL or BUCTRIL GEL plus Cleanse® 2EC applications made when temperatures are expected to exceed 80°F 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 trifoliate leaves. Unacceptable crop injury may occur to alfalfa in the 2 trifoliate or smaller stage growth, when alfalfa stand is uneven and conditions favor leaf burn. When applications of Cleanse® 2EC plus BUCTRIL or BUCTRIL GEL are made when temperatures are expected to exceed 70°F and three days following such application can result in unacceptable crop injury. Crop leaf burn can occur following Cleanse® 2EC plus BUCTRIL GEL applications. Warm, humid conditions may enhance leaf burn. However, new crop growth will not be affected.
- 7 Do not make application 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 CLEANSE® 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR CANOLA (See tables above for specific grasses and growth stages)

	APPLICATION RATES/ACRE				
PRODUCT	ANNUAL GRASSES <sup>1</sup>	PERENNIAL GRASSES	AMMONIUM	SULFATE	
			GROUND	AIR	
CLEANSE® 2EC2	4 – 5 fl oz				
+	+	-	3.0 lbs	3.0 lbs	
LIBERTY <sup>3</sup>	34 fl oz				

- Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE USE IN DRY BEAN, CANOLA, FLAX MUSTARD SEED, SOYBEAN AND SUGAR BEET FOR SMALL ANNUAL GRASSES table.
- 2 Do not apply Cleanse® 2EC tank mix during or after bolting or flowering or crop injury could occur.
- 3 For use only on LibertyLink® canola.

COTTON

Table 3. CLEANSE® 2EC TANK MIXED WITH COBRA® AND MSMA APPLIED POST DIRECTED TO COTTON

PRODUCT <sup>1</sup>	APPLICATION RATES/ACRE <sup>2</sup>		CROP OIL CONCENTRATE <sup>3</sup> V/V	COMMENTS
CLEANSE® 2EC <sup>4</sup>	ANNUAL GRASSES	PERRENIAL GRASSES	GROUND	
+	6 – 8 fl oz	8 – 16 fl oz	1%	Reduce broadcast
COBRA + MSMA	See COBRA label for rates to control broadleaf weeds and height limitations for cotton. See Cleanse® 2EC label for weed height and species controlled.			rate in proportion to the band area actually treated.
(4.0 lbs/gal) or MSMA (6.6 lbs/gal)	See MSMA label for rates to control broadleaf weeds and height limitations for cotton. See Cleanse® 2EC label for weed height and species controlled.			

- 1. Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not recommended in these situations.
- 2. If grass regrowth occurs or an additional flush of new grass emerges, apply a second application of Cleanse® 2EC alone without a tank mix herbicide according to the appropriate size and rate.
- 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 can result and a second non-post directed application of Cleanse® 2EC may be necessary.

Table 4. CLEANSE® 2EC TANK MIXED WITH BUCTRIL 4 EC TO CONTROL EMERGED WEEDS IN BXN COTTON AS A BROADCAST APPLICATION

PRODUCT <sup>1</sup>	APPLICATION RATE/ACRE <sup>2</sup> ANNUAL GRASSES	CROP OIL CONCENTRATE PER ACRE <sup>3</sup>	COMMENTS <sup>7</sup>
CLEANSE® 2EC	8 – 16 fl oz	1 qt.	See charts for
+	Refer to BUCTRIL 4 EC label for	-	grasses controlled.
BUCTRIL 4 EC <sup>4,5,6</sup>	rates to control broadleaf weeds and		
	height limitations for cotton.		

- 1. Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage.
- 2. If grass regrowth occurs or an additional flush of new grass emerges, apply a second application of Cleanse® 2EC at the specified rate with the appropriate amount of crop oil concentrate in a non-BUCTRIL tank mix.
- 3. Always add a crop oil concentrate 1 qt/A by ground in the finished spray solution.
- 4. Applications of BUCTRIL 4 EC can be made only to cotton that has been genetically modified for crop tolerance to postemergence over-the-top applications of bromoxynil.
- 5. Do not apply the Cleanse® 2EC plus BUCTRIL tank mix within 75 days of harvest.
- 6. Do not exceed 2 applications of BUCTRIL before cotton is 12 inches tall and one application after 12 inches tall.
- 7. Use a minimum of 10 gallons of spray solution per acre.

Table 5. CLEANSE® 2EC TANK MIXED WITH GLYPHOSATE TO CONTROL EMERGED GRASSES IN COTTON AS A BROADCAST APPLICATION

	APPLICATION	RATE/ACRE1	E/ACRE <sup>1</sup> ADJUVANT		
PRODUCT	ANNUAL GRASSES	PERENNIAL GRASSES	Glyphosate formulation with built in adjuvant	Glyphosate formulation without built-in adjuvant	COMMENTS
CLEANSE® 2EC + GLYPHOSATE	6 – 8 fl oz  See glyphosate control broadlea height limitations		Nonionic surfactant @ 0.125 to 0.25% v/v plus ammonium sulfate @ 8.5 to 17 lbs per 100 gallons carrier	Crop oil concentrate @ 1 pt/A plus ammonium sulfate @ 8.5 to 17 lbs per 100 gals carrier	See charts for grasses controlled. Use a minimum of 10 gals of spray solution per acre.

<sup>1.</sup> If grass regrowth occurs or an additional flush of new grass emerges, apply a second application of Cleanse® 2EC at the specified rate with the appropriate amount of crop oil.

# DRY SHELLED BEAN Table 6. CLEANSE® 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR DRY SHELLED BEANS

(See tables above for specific grasses and growth stages) APPLICATION RATES/ACRE<sup>1</sup> CROP OIL PRODUCT<sup>2</sup> ANNUAL **PERENNIAL** CONCENTRATE<sup>3</sup> **GRASSES GRASSES** (V/V) **GROUND** AIR CLEANSE® 2EC 8 – 10 fl oz 10 – 16 fl oz 1% 1% BASAGRAN® 1.0 - 2.0 pts/A1 to 2 pts

- 1. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of Cleanse® 2EC alone without a tank mix herbicide according to the appropriate size and rate.
- 2. Broadleaf weed control can 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 recommended in these situations.
- 3. Always use a crop oil concentrate at the listed rate, but not less than 1 pt/A, in the finished spray volume.

FLAX
Table 7. REDUCED RATE CLEANSE® 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR FLAX
(See tables above for specific grasses and growth)

	APPLICATION RATES/ACRE			
PRODUCT	ANNUAL GRASSES <sup>1</sup>	PERENNIAL GRASSES	CROP CONCEN	_
			GROUND	AIR
CLEANSE® 2EC	4 – 5 fl oz			
+	+	-	1 pt	1 pt
BRONATE ADVANCED™ <sup>2,3</sup>	11.4 fl oz		•	-
CLEANSE® 2EC	4 – 5 fl oz			
+	+	-	1 pt	1 pt
BRONATES®	0.9 pt		•	-
CLEANSE® 2EC	4 – 5 fl oz			
+	+	-	1 pt	1 pt
BUCTRIL <sup>2,3</sup>	1.0 pt		•	·
CLEANSE® 2EC	4 – 5 fl oz			
+	+	_	1 pt	1 pt
RHONOX <sup>®2,3</sup>	0.25 – 0.5 pt		•	·

- 1. Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE USE IN DRY BEANS, CANOLA, FLAX, MUSTARD SEED, SOYBEANS AND SUGAR BEETS FOR SMALL ANNUAL GRASSES table.
- 2. Do Not apply Cleanse® 2EC tank mix during or after the bud stage or to ornamental flax as crop injury can occur
- 3. Do Not apply tank mixes when temperatures are expected to exceed 85°F at or for 3 days following application as crop injury can occur.

SOYBEAN
Table 8. CLEANSE® 2EC TANK MIXES³ TO CONTROL ANNUAL GRASSES WHEN USED AS A BURNDOWN IN NOTILL SOYBEAN

PRODUCT	PRODUCT RATE/ACRE <sup>1</sup>	GRASS HEIGHT (inches)	CROP OIL CONCENTRATE /ACRE <sup>2</sup>	28%N OR 32%N QTS/A OR 2.5 TO 4.0 LBS AMS
CLEANSE® 2EC + 2,4-D ESTER*,3	3 fl oz	Foxtail 1 to 3 Fall Panicum 1 to 3	1 qt	1 – 2 qts or 2.5 – 4.0 lbs AMS
	4 fl oz	Foxtail 1 to 4 Fall Panicum 1 to 4	1 qt	1 – 2 qts or 2.5 – 4.0 lbs AMS
	6 – 8 fl oz + 0.5 lb a.i.	(See Grass Chart for grasses claimed)	1 qt	1 – 2 qts or 2.5 – 4.0 lbs AMS

<sup>\*2,4-</sup>D ester should NOT be used where drift sensitive crops may be grown.

- 1. Apply a second application of Cleanse® 2EC according to the appropriate size and rate, if regrowth occurs or an additional flush of new grass emerges.
- 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 Cleanse® 2EC plus 2,4-D ester: AUTHORITY® BROADLEAF, CANOPY XL®, DUAL® 8E, DUAL II, DUAL MAGNUM®, PROWL®, VALOR™, SENCOR®, SENCOR plus the DUAL products and TURBO®.

Table 9. CLEANSE® 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN (See tables above for specific grasses and growth stages)

APPLICATION RATES/ACRE <sup>1</sup>					
PRODUCT <sup>2</sup>	ANNUAL GRASSES	PERENNIAL GRASSES	CROP OIL CONCENRATE <sup>3</sup> (V/V)		
			GROUND	AIR	
CLEANSE® 2EC + COBRA	6 – 8 fl oz + 12.5 fl oz	8 – 16 fl oz + 12.5 fl oz	0.5 to 1%	1%	
CLEANSE® 2EC + BASAGRAN 4 SL	8 – 10 fl oz + 1 – 2 pts	10 – 16 fl oz + 1 – 2 pts	1%	1%	
CLEANSE® 2EC + Glyphosate (For use on Roundup Ready soybeans only)	6 – 8 fl oz + 0.75 – 3.0 lb a.i.	8 – 16 fl oz + 0.75 – 3.0 lb a.i.	0.5 to 1% <sup>4</sup>	1% <sup>4</sup>	
CLEANSE® 2EC + FLEXSTAR® HL <sup>6</sup>	6 – 8 fl oz See FLEXSTAR HL label for specific application rates	8 – 16 fl oz See FLEXSTAR HL label for specific application rates	1%	1%	
CLEANSE® 2EC + CLASSIC® 25 DG	8 – 10 fl oz + 0.5 – 0.75 oz	10 – 16 fl oz + 0.5 – 0.75 oz	1%	1%	
CLEANSE® 2EC <sup>4</sup> + PURSUIT 70 DG	6 – 8 fl oz + 1.44 oz	8 – 16 fl oz + 1.44 oz	1%	1%	
CLEANSE® 2EC <sup>5</sup> + COBRA +	8 – 10 fl oz + 6 – 8 fl oz +	-	0.5%	1%	
CLASSIC 25 DG CLEANSE® 2EC <sup>5</sup> + COBRA + BASAGRAN 4 SL	0.5 – 0.75 oz 8 – 10 fl oz + 6 – 10 fl oz + 1 – 1.5 pts	-	0.5%	1%	
CLEANSE® 2EC <sup>5</sup> + COBRA + PURSUIT 70 DG	8 – 10 fl oz + 6 – 10 fl oz + 1.44 oz	-	0.5%	1%	
CLEANSE® 2EC <sup>5</sup> + STORM®	8 – 10 fl oz + 1.5 pts	-	0.5%	1%	
CLEANSE® 2EC <sup>5</sup> + RESOURCE® + PURSUIT 70 DG	8 – 10 fl oz + 4 fl oz + 1.44 oz	-	1%	1%	
CLEANSE® 2EC <sup>5</sup> + RESOURCE + BASAGRAN	8 – 10 fl oz + 4 fl oz +	-	1%	1%	
CLEANSE® 2EC <sup>5</sup> + RESOURCE + CLASSIC	1 pt 8 – 10 fl oz + 4 fl oz + 0.5 oz	-	1%	1%	
CLEANSE® 2EC <sup>5</sup> + COBRA +	6 - 8 fl oz + 6 fl oz +	-	0.5%	1%	

Table 9. CLEANSE® 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN (See tables above for specific grasses and growth stages)

	APPL	ICATION RATES/ACE	RE <sup>1</sup>	
PRODUCT <sup>2</sup>	ANNUAL GRASSES	PERENNIAL GRASSES	CROP CONCEN (V	OIL IRATE³ //V)
			GROUND	AIR
RESOURCE	4 fl oz			
CLEANSE® 2EC <sup>5</sup>	6 – 8 fl oz	8 – 16 fl oz		
+	+	+	1%	-
FIRSTRATE®	0.3 oz	0.3 oz		
CLEANSE® 2EC <sup>5</sup>	6 – 8 fl oz	8 – 16 fl oz		
+	+	+		
COBRA	6 – 8 fl oz	6 – 8 fl oz	1%	-
+	+	+		
FIRSTRATE	0.3 oz	0.3 oz		
CLEANSE® 2EC <sup>5</sup>	6 – 8 fl oz		40/	
+ DADTOD® (4 AC)	+ 4	-	1%	-
RAPTOR® (1 AS) CLEANSE® 2EC <sup>5</sup>	4 – 5 fl oz			
	6 – 8 fl oz +			
+ COBRA	6 – 8 fl oz		1%	
+	+	-	1 /0	_
RAPTOR (1 AS)	4 – 5 fl oz			
CLEANSE® 2EC <sup>5</sup>	6 – 8 fl oz <sup>7</sup>			
+	+	_	1 qt	_
SYNCHRONY® STS™	0.5 oz/A		. 4.	
CLEANSE® 2EC5	$6 - 8 \text{ fl oz}^7$			
+	+			
COBRA	4 – 8 fl oz	-	1 pt	-
+	+			
SYNCHRONY STS	0.5 oz			
CLEANSE® 2EC <sup>5</sup>	6 – 8 fl oz			
+	+	-	1 qt	-
RESOURCE	4 – 12 fl oz			
CLEANSE® 2EC <sup>5</sup>	8 – 10 fl oz			
+	+		40/	
FRONTROW™	Refer to	-	1%	-
	FRONTROW label			
CLEANSE® 2EC	for use rates	0 16 fl o-	1	
	6 – 8 fl oz +	8 – 16 fl oz +		
+ FIRSTRATE	0.3 oz	0.3 oz.		
FIRSTRATE +	0.3 02	0.3 02.	1%	_
FLEXSTAR HL <sup>5</sup>	Refer to the	Refer to the	1 /0	_
ILLAGIANTIL	FLEXSTAR HL	FLEXSTAR HL		
	label for specific	label for specific		
	application rates	application rates		

<sup>1</sup> If grass regrowth occurs or an additional flush of new grass emerges, make a second application of Cleanse® 2EC alone – without a tank mix herbicide – according to the appropriate size and rate.

- 4 When Cleanse® 2EC is tank mixed with glyphosate, the addition of 2.5 lb. ammonium sulfate is required. If the glyphosate formulation has a stand alone build-in adjuvant, add 0.125% v/v nonionic surfactant in place of crop oil concentrate, Add 0.5% to 1% crop oil concentrate for ground application and 1% v/v for aerial application, if the glyphosate formulation does not have a build-in adjuvant system.
- 5 When Cleanse® 2EC 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, the addition of 1 2 qts/A of liquid fertilizer (10-34-0, 28%N, or 32%N) is recommended. An equivalent amount, 2.5 4.0 lbs/A, of spray grade ammonium sulfate (AMS) may be added in place of liquid fertilizer. Fertilizer adjuvants are to be added in addition to the crop oil concentrate.

<sup>2</sup> Broadleaf weed control can 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 recommended in these situations.

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

- 6 Refer to the FLEXSTAR HL label for geographic and rotational restrictions.
- 7 Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE USE IN DRY BEAN, CANOLA, FLAX, MUSTARD SEED, SOYBEAN AND SUGAR BEET FOR SMALL ANNUAL GRASSES table.

Table 10. REDUCED RATE CLEANSE® 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN (See table for reduced rate use in dry bean, canola, flax, mustard seed, soybean and sugar beet for small annual grasses for specific grasses and growth stages)

	AP	APPLICATION RATES/ACRE <sup>1</sup>				
PRODUCT	ANNUAL GRASSES <sup>2</sup>	PRENNIAL GRASSES	CROP CONCENT (V/V	「RATE <sup>3,4</sup>		
			GROUND	AIR		
CLEANSE® 2EC	4 – 8 fl oz					
+	+	=	1%	1%		
FIRSTRATE	0.3 oz					
CLEANSE® 2EC	4 – 6 fl oz	•				
+	+	-	1%	1%		
PURSUIT 70 DG	1.44 oz					

- 1. Make a second application of Cleanse® 2EC alone without a tank mix herbicide according to the appropriate size and rate, if grass regrowth occurs or an additional flush of new grass emerges.
- 2. Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE USE IN DRY BEAN, CANOLA, FLAX, MUSTARD SEED, SOYBEAN AND SUGAR BEET FOR SMALL ANNUAL GRASSES table.
- 3. Always use a crop oil concentrate at the listed rated, but not less than 1 pt/A, in the finished spray volume.
- 4. When Cleanse® 2EC is tank mixed at reduced rates, the addition of 1 2 qts/A of liquid fertilizer (10-34-0, 28% N, or 32%N) is required. An equivalent amount, 2.5 to 4.0 lbs/A, of spray grade ammonium sulfate (AMS) may be added in place of liquid fertilizer. Fertilizer adjuvants are to be added in addition to the crop oil concentrate.

PEANUT
Table 11. Cleanse® 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR PEANUT
(See tables above for specific grasses and growth stages)

	AP	APPLICATION RATES/ACRE <sup>1</sup>			
PRODUCT <sup>2</sup>	ANNUAL GRASSES <sup>2</sup>	PERENNIAL GRASSES	CROP CONCEN (V/V	TRATE <sup>3</sup>	
			GROUND	AIR	
CLEANSE® 2EC	8 – 10 fl oz				
+	+	-	1%	1%	
BASAGRAN	1.0 – 2.0 pts				
CLEANSE® 2EC	8 – 10 fl oz				
+	+	-	1%	1%	
STORM	1.5 pts				

- 1. Make a second application of Cleanse® 2EC alone without a tank mix herbicide according to the appropriate size and rate, if grass regrowth occurs or an additional flush of new grass emerges.
- 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 recommended 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 PEANUT WITH CLEANSE® 2EC					
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" & "DIRECTIONS FOR PERENNIAL GRASSES"	Up to and including grasses in the seed head stage	16	32		

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

#### **RESTRICTIONS:**

- Do not apply as part of a tank mix when applying Cleanse® 2EC for grass suppression.
- Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) in a single application.
- Do not apply more than 32 fl. oz./A (0.50 lb. ai/A) per year.
- Do not exceed two applications at 16 fl. oz./A (0.25 lb. ai/A) or one (1) application at 32 fl. oz./A (0.50 lb. ai/A).

#### SUGAR BEET

Table 12. CLEANSE® 2EC TANK MIXED WITH STINGER® APPLIED TO SUGAR BEET

(See tables above for specific grasses and growth stages)

PRODUCT <sup>2</sup>	APPLICATION RAT ANNUAL <sup>2</sup> GRASSES	ES/ACRE <sup>1</sup> PERENNIAL GRASSES	CROP CONCEN <sup>-</sup> (V/\	TRATE <sup>3</sup>
			GROUND	AIR
CLEANSE® 2EC	6 – 8 fl oz	8 – 16 fl oz	1%	)
+ STINGER	See STINGER label for	rates.		

- 1. Make a second application of Cleanse® 2EC alone without a tank mix herbicide according to the appropriate size and rate, if grass regrowth occurs or an additional flush of new grass emerges.
- 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 recommended 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. CLEANSE® 2EC TANK MIXED WITH BETAMIX® OR BETANEX® APPLIED TO SUGAR BEET

	WEEDS	WEEDS CONTROLLED		APPLICATION
PRODUCT <sup>2</sup>	COMMON NAME	SCIENTIFIC NAME	HEIGHT (Inches)	RATES/ACRE1
CLEANSE® 2EC 3	Barnyardgrass	Echinochloa crus-galli	1 to 3	8 fl oz
+	Foxtail	Setaria spp.	1 to 3	See BETAMIX label for
BETAMIX	Foxtail Millet	Setaria italica	1 to 3	rates to control
OR BETANEX	Wild Oat	Avena fatua	1 to 3	broadleaf weeds. No
	Wild Proso Millet	Panicum miliaceum	1 to 3	additives are
				recommended in this
				tank mix.
				See BETANEX label for
				rates to control
				broadleaf weeds. <b>No</b>
				additives are
				recommended in this
				tank mix.

- 1. Do not use crop oil concentrate. No additives are recommended in this tank mix. Make a second application of Cleanse® 2EC alone without a tank mix herbicide according to the appropriate size and rate, if grass regrowth occurs or an additional flush of new grass emerges.
- 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 recommended in these situations.
- 3. Make a second application of Cleanse® 2EC at the full label rate with appropriate rate of crop oil concentration, if grass regrowth occurs or an additional flush of new grass emerges.

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

		APPLICATION RATES/ACRE <sup>1</sup>			
PRODUCT	ANNUAL GRASSES			D OIL <sup>2</sup>	
			GROUND	AIR	
CLEANSE® 2EC	2 – 3 fl oz	Green Foxtail (1-2)	1.5%	1.5%	
+	+	Yellow Foxtail (1-2)			
BETANEX	$0.8 - 12 \text{ fl oz}^3$	Barnyardgrass (1-2)			
or	or	Wild Oat (1-2)			
BETAMIX	$0.8 - 12 \text{ fl oz}^3$	Volunteer Cereals (1-2)			

- 1. Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not recommended in these situations.
- 2. Always use a methylated seed oil at the listed rate, but not less than 1 pt/A, in the finished spray volume.
- 3. When sugar beets are in the cotyledon to 4-leaf stage, use 8 fl oz/A rate. This rate can be increased up to 12 fl oz/A when the smallest sugar beet plants in the field are in the 4 true leaf stage or larger.

#### DIRECTIONS FOR USE WITH MICRO-RATE APPLICATIONS TO SUGAR BEETS

Multiple micro-rate applications of Cleanse<sup>®</sup> 2EC in tank mixtures with reduced rates of BETANEX or BETAMIX and methylated seed oils can be applied by air or ground equipment to sugar beets to control early germinating annual grasses listed above. Do not exceed the rate of 0.12 lb ai/A broadcast application for BETANEX or BETAMIX 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 lb 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, i.e. good conditions for plant growth and development, are essential for adequate weed control. All use precautions and restrictions on the BETANEX and BETAMIX master labels must be followed.

#### DIRECTIONS FOR USING MICRO-RATE MULTIPLE APPLICATIONS OF CLEANSE® 2EC TANK MIXES

Apply Cleanse® 2EC in broadcast applications only at a rate of 2-3 fl oz/A in tank mixture with either BETANEX or BETAMIX following the directions for use on the tank mix partner label. A minimum of three sequential applications of 2 fl oz/A or a minimum of 2 sequential applications of 3 fl oz/A should be utilized for Cleanse® 2EC tank mixtures. A minimum of 3 sequential applications of BETANEX or BETAMIX should be used. Accurate timing is essential. Immediately after weeds emerge, make initial application and make repeat applications on 5 to 7 day intervals. Return to conventional application rates of Cleanse® 2EC, 6-8 fl oz/A, and add rates of BETANEX or BETAMIX as directed on their label, if weed control is not adequate due to climatic conditions, spray coverage or other factors. A spray adjuvant is not recommended when using conventional rates of BETANEX or BETAMIX in tank mixtures with Cleanse® 2EC.

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

Even with favorable climatic conditions, not all weeds will be adequately controlled. If multiple micro-rate applications do not adequately control weeds, conventional rates of Cleanse® 2EC, BETANEX or BETAMIX and/or hand labor may be required. 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. If the BETANEX or BETAMIX rate exceeds 0.12 lb ai/A broadcast, methylated seed oils must not be added. This addition of methylated seed oils could increase the possibility of crop injury at dosage rates greater than 0.12 lb ai/A.

#### **GROUND APPLICATION**

It is essential to use sufficient spray volumes and pressure to ensure complete coverage. Use a minimum of 10 gallons and maximum of 20 gallons spray solution per acre. Spray pressures should reflect a minimum of 30 psi and a maximum of 60 psi at the nozzle. Do Not use flood nozzles.

#### **AERIAL APPLICATION**

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

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

		APPLICATION RATES/ACRE <sup>1</sup>		
PRODUCT <sup>2</sup>	ANNUAL GRASSES	PERENNIAL GRASSES	CROP OIL CONCENTRATE <sup>3</sup> (V/V)	
CLEANSE® 2EC	6 – 8 fl oz	8 to 16 fl oz		
+	+	+	1%	
EMINENT®	13 fl oz	13 fl oz		

- 1. Make a second application of Cleanse® 2EC at the full label rate with appropriate rate of crop oil concentration, if grass regrowth occurs or an additional flush of new grass emerges.
- 2. Refer to Cleanse® 2EC and fungicide label for rates and weeds and diseases controlled.
- 3. Always use a crop oil concentrate at the listed rate, but not less than 1 pt/A, in the finished spray volume.

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

	APPLICATION RATES/ACRE <sup>1</sup>						OP		
PRODUCT <sup>2</sup>	ANNUAL GRASSES	PERENNIAL GRASSES	CROP OIL CONCENTRATE (V/V) <sup>3</sup>	Alfalfa⁴	Cotton	(Mint <sup>4,5</sup>	Peanut	Soybean	Sunflower
CLEANSE® 2EC	6 – 8 fl oz	8 – 16 fl oz	1%		Х	Χ	Χ		
+ ORTHENE® 75 S or	0.33 – 1.33 lbs +	0.33 – 1.33 lbs +							
ORTHENE 97	0.25 – 1.0 lb	0.25 – 1.0 lb							
CLEANSE® 2EC	6 – 8 fl oz	8 – 16 fl oz	1%		Х	Х	Х	Х	
+ ORTHENE 90 S <sup>6</sup>	+ 0.25 1.b	0 25 1 lb							
CLEANSE® 2EC	0.25 – 1 lb 6 – 8 fl oz	0.25 – 1 lb 8 – 16 fl oz	1%		Х		Х		
+	+	+	1 70		^		^		
DANITOL® 2.4 EC	10-2/3 – 16 fl oz	10-2/3 – 16 fl oz							
CLEANSE® 2EC	6 – 8 fl oz	8 – 16 fl oz	1%						Х
+	+	+							
ASANA XL®	See ASANA XL	See ASANA XL							
CLEANSE® 2EC	label 6 – 8 fl oz	label 8 – 16 fl oz	1%						X
CLEANSE® ZEC +	0 - 8 II 02 +	8 - 10 II 02 +	1 %						^
WARRIOR®	See WARRIOR label	See WARRIOR label							
CLEANSE® 2EC	10 – 16 fl oz <sup>7</sup>	10 – 16 fl oz	1%	Χ					
+	+	+							
WARRIOR	See WARRIOR label	See WARRIOR label							
CLEANSE® 2EC	10 – 16 fl oz	10 – 16 fl oz	1%	Х					
BAYTHROID®	+ See BAYTHROID label	+ See BAYTHROID label							
CLEANSE® 2EC	10 – 16 fl oz <sup>7</sup>	10 – 16 fl oz	1%	Х					
+ DIMETHOATE	+ See Dimethoate label	+ See Dimethoate label							
CLEANSE® 2EC	10 – 16 fl oz	10 – 16 fl oz	1 – 2 pt <sup>8</sup>	Χ					
+ LORSBAN®	+ See LORSBAN label	+ See LORSBAN label							
CLEANSE® 2EC	10 – 16 fl oz <sup>7</sup>	10 – 16 fl oz	1%	Χ					
+ POUNCE®	+ See POUNCE label	+ See POUNCE label							

- 1. Make a second application of Cleanse® 2EC alone without a tank mix insecticide according to the appropriate size and rate, if grass regrowth occurs or an additional flush of new grass emerges.
- 2. Refer to Cleanse® 2EC and insecticide label for rates and weeds and insects controlled.
- 3. Always use a crop oil concentrate at the listed rate, but not less than 1 pt/A, in the finished spray volume.
- 4. Certain insecticides can cause temporary phytotoxic symptoms on alfalfa and mint foliage. See the insecticide label for further information. Prior to using any of these insecticide/herbicide tank mixtures, it is suggested a small area of the field be treated and observed for crop injury before treating the entire field.
- 5. Rates for Cleanse® 2EC for annual grass control in baby mint should be 6 8 fl oz/A; minimum of 8 fl oz/A for annual grass control in established mint and 8 16 fl oz/A for perennial grass control. Add a crop oil concentrate at the rate of 1.0 2.0 pts/A.
- 6. ORTHENE 90 S insecticide tank mix use with Cleanse® 2EC is permitted only in a state having an approved Section 24(c) registration for ORTHENE 90 S use in sowheans
- 7. The rate for Cleanse® 2EC for annual grass control in seedling alfalfa should be  $6-8\,\mathrm{fl}$  oz/A.
- 8. For Cleanse® 2EC plus LORSBAN tank mix, reduce the adjuvant rate down to 1.0 pt/A when the LORSBAN rate is 1.0 pt/A or higher.

Table 17. DIRECTIONS FOR ROUNDUP READY VOLUNTEER CORN CONTROL IN ROUNDUP READY SOYBEANS WITH CLEANSE® 2EC HERBICIDE TANK MIX

ROUNDUP READY VOLUNTEER CORN HEIGHT (INCHES)	CLEANSE® 2EC RATE FL OZ/A	GLYPHOSATE <sup>1</sup> RATE FOR FORMULATIONS <u>WITH</u> BUILT IN ADJUVANT	ADJUVANT
<12	4	1.0 – 2.0 lb ai/A	Nonionic surfactant @
12 – 18	5	(Approx. equivalent to 22 – 44 fl oz/A of	0.125 – 0.25% v/v
18 – 24	6	ROUNDUP Weather MAX)	plus ammonium (AMS) @
			8.5 – 17 lbs per 100 gallons
			carrier

ROUNDUP READY VOLUNTEER CORN HEIGHT (INCHES)	CLEANSE® 2EC RATE FL OZ/A	GLYPHOSATE¹RATE FOR FORMULATIONS <u>WITHOUT</u> BUILT IN ADJUVANT	ADJUVANT
<12	4	Up to 2.0 lb ai/A	Crop oil concentrate @
12 to 18	5	(Equivalent to 32 – 64 fl oz/A of	1 pt/A plus ammonium
18 – 24	6	ROUNDUP Original)	sulfate (AMS) @ 8.5 – 17 lbs per 100 gallons carrier

<sup>1</sup> Glyphosate formulation must be labeled for use on Roundup Ready soybeans.

#### ALWAYS FOLLOW THE MOST RESTRICTIVE LABELING LANGUAGE OF ANY PRODUCT USED IN A TANK MIX

- Make application only to actively growing grass and broadleaf weeds at height or growth stage listed on each label.
- Make application under favorable soil moisture and humidity, which exist a few days after rainfall or within seven days after irrigation.
- Reduced grass control can sometimes result with tank mix application. Make a second application of Cleanse<sup>®</sup> 2EC as specified in the respective size and rate tables, if regrowth occurs or an additional flush of new grass emerges.
- This tank mix may be applied postemergence to ROUNDUP READY soybeans up through the full flowering stage. Do not
  make application less than 60 days before harvest.
- Severe injury or destruction will result unless contact is avoided with foliage, green stems, or fruit crops, or any desirable
  plants and trees, other than soybeans with ROUNDUP READY gene.
- Do not allow the Cleanse® 2EC plus ROUNDUP to mist, drip, drift or splash onto desirable vegetation as minute quantities of the tank mix can cause severe damage or destruction to the crops, plants, or other areas on which treatment is 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 will 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.
- Do not tank mix Cleanse<sup>®</sup> 2EC when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.

# FALLOW LAND DIRECTIONS FOR USE

Cleanse® 2EC can be used to control annual and perennial grasses in land that has been left fallow the previous year and on other non-producing agricultural areas. Make application at 6-8 fl oz/A for annual grasses and 8-16 fl oz/A for perennial grasses. Cleanse® 2EC can be tanked mixed with 2,4-D ester or BANVEL® SFG for broad spectrum control when both grass and broadleaf weeds are the target pest. Apply a minimum of 8 fl oz/A Cleanse® 2EC when both annual and perennial grasses occur in the same field.

#### **APPLICATION INFORMATION**

- Use a minimum spray volume of 5 gallons/A for aerial applications and 15 gallons/A for ground applications.
- Make application only to actively growing grasses when the first grass reaches the weed height as specified by the "Directions for Annual and Perennial Grasses" section of this label.
- Do not apply to drought stressed grasses.
- Do not apply to grasses that have tillered, formed seed-heads or exceeded specified growth stage.
- Do not use flood jet nozzles.
- Do not plant any crop for 30 days after application unless clethodim is registered for use on that crop.
- Annual grasses that emerge after the Cleanse<sup>®</sup> 2EC application will not be controlled and a second application could be necessary.
- Do not mow area for two (2) weeks prior to or after the Cleanse<sup>®</sup> 2EC application.
- Control of perennial grasses may require more than one (1) application in non-tilled areas.
- Follow the use rate restrictions indicated in the CROP SPECIFIC USE INSTRUCTIONS FOR CLEANSE® 2EC table for FALLOW LAND.
- **Tank Mixing:** 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.

Table 18. CLEANSE® 2EC IN TANK MIXES TO CONTROL ANNUAL AND PERENNIAL GRASSES IN FALLOW LAND

	APPLICAT	APPLICATION RATES/ACRE <sup>1</sup>		ICENTRATE <sup>2</sup>
PRODUCT	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
CLEANSE® 2EC	6 – 8 fl oz	8 – 16 fl oz.	1%	1%
+	+			
2,4-D ester	0.5 lb/A			
or	or			
BANVEL SGF	See BANVEL SGF			
	label for rates			

<sup>1</sup> See Cleanse® 2EC label for weed height and species control. Review BANVEL SGF and 2,4-D labels for use rates, weeds controlled and crop restrictions.

<sup>2</sup> 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 CLEANSE® 2EC				
GRASS SPECIES	WEED STAGE	RATE FL OZ/ ACRE	HIGH RATE	
Annual and perennial grasses that exceed height	Up to and including grasses in	12	16	
claimed for control on height chart above	the seed head stage			
Do not apply as part of a tank mix when applying Cleanse® 2EC for grass suppression.				
Add a crop oil concentrate at 1 qt/A by ground to the	ne finished spray volume.			

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

PRODUCT	PRODUCT RATES	GRASS WEEDS CONTROLLED/SUPRESSED		WEED STAGES
		Common Name	Scientific Name	STAGES
CLEANSE® 2EC	10 – 12 fl oz/A	Tall Fescue	Festuca	4 to 6 inches tall (40-60%
			arundinacea	green-up)

ADJUVANT: Cleanse<sup>®</sup> 2EC must be applied with a crop oil concentrate at 1 qt/A, plus a spray grade ammonium sulfate (AMS) at 2.5 – 4 lbs/A.

Recommended Mixing Order: Thoroughly mix spray grade ammonium sulfate in water, add Cleanse<sup>®</sup> 2EC, then add crop oil concentrate.

#### **SPECIAL APPLICATION INSTRUCTIONS**

Burn or mow fields a minimum of 3 weeks prior to application to remove excess crop residue. Make application in the spring at 40 - 60% tall fescue green-up, prior to emergence of warm-season grasses. Do not mow area for two (2) weeks after the Cleanse<sup>®</sup> 2EC application.

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

Make application only to fields that have warm season grasses established for two (2) years. Application of Cleanse<sup>®</sup> 2EC to emerged warm-season grasses may cause injury. Do not make applications to warm-season grasses grown for seed.

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

ATTENTION: Cleanse<sup>®</sup> 2EC applications are most effective if applied when average nighttime temperatures are consistently greater than or equal to 47°F.

# Table 20. CLEANSE® 2EC FOR THE SUPPRESSION OF TALL FESCUE SEED-HEADS IN NONPRODUCING AGRICULTURAL AREAS

AGRICULTURAL AREAS			
PRODUCT	PRODUCT RATE	SUPPRESSION	APPLICATION TIMING
CLEANSE® 2EC	1-1/2 – 2 fl oz/A	Tall Fescue Seed-Heads (Festuca arundinacea	(50 to 90% Tall Fescue green-up)

ADJUVANT: Cleanse<sup>®</sup> 2EC must be applied with a crop oil concentrate at 1 qt/A, plus a spray grade ammonium sulfate (AMS) at 2.5 – 4 lbs/A.

Mixing Order: Thoroughly mix spray grade ammonium sulfate in water, add Cleanse® 2EC, then add crop oil concentrate.

#### **SPECIAL APPLICATION INSTRUCTIONS**

Make application at 50 – 90% tall fescue green-up.

If less tall fescue green matter is present, use the higher Cleanse® 2EC rate.

Do not mow area for two (2) weeks after the Cleanse<sup>®</sup> 2EC application.

Make application in a minimum of 15 - 20 gallons water per acre at a spray pressure of 40 - 60 PSI at the nozzle. Make application using flat fan or hollow cone nozzles. Do not use flood nozzles.

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

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

# ORNAMENTALS DIRECTIONS FOR USE

Cleanse® 2EC can be used for ornamental plant uses to control labeled grass weeds in greenhouse, lathhouses, shadehouses, and around outdoor ornamentals, including nurseries, parks, roadside plants, and structure landscapes.

**IMPORTANT:** Cleanse<sup>®</sup> 2EC successfully controls weeds in newly transplanted and established non-grassy ornamentals. Plant tolerance to Cleanse<sup>®</sup> 2EC at labeled rates has been found to be acceptable for the indicated genera and species listed below. It is recommended that the user determine if herbicide can be used safely on a few plants prior to widespread application, due to variability within species, crop growth stage, environmental conditions, and application techniques. Neither the seller nor the manufacturer of Cleanse<sup>®</sup> 2EC have investigated the safety factor to ornamental plants not listed on this label.

The following plants have shown a tolerance for Cleanse® 2EC applications.

#### **ORNAMENTAL TREES**

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

#### **GROUND COVERS**

0.100.15 00.12.10				
COMMON NAME	SCIENTIFIC NAME			
BUGLEWEED, CARPET	Ajuga reptans			
IVY, ENGLISH	Hedera helix			
JAPANESE SPURGE	Pachysandra terminalis			
LILYTURF	Liriope muscari			
COMMON NAME	SCIENTIFIC NAME			
MONEYWORT	Lysimachia nummularia			
MONDO GRASS, WHITE	Ophiopogon jaburan			
MONDO GRASS, DWARF Ophiopogon japonicus				
PERIWINKLE, LESSER	Vinca minor			

#### GARDEN FLOWERS AND PLANTS

COMMON NAME	SCIENTIFIC NAME

### **GARDEN FLOWERS AND PLANTS**

GARDEN FLOWERS AND PLANTS					
AGERATUM	Ageratum spp.				
ALYSSUM*, SWEET	Lobularia maritima				
ASPARAGUS FERN	Asparagus setaceus				
BLEEDING HEART	Dicentra spectabilis				
CAST IRON PLANT	Aspidistra elatior				
CHRYSANTHEMUM	Chrysanthemum spp.				
CINQUEFOIL	Potentilla spp.				
COLEUS	Coleus spp.				
CORALBELLS	Heuchera sanguinea				
CRANESBILL	Geranium spp.				
DAHLIA	Dahlia spp.				
DAISY, TRAILING AFRICAN	Osteospermum fruticosum				
DAYLILY	Hemerocallis spp.				
DUSTY MILLER	Senecio cineraria				
EUONYMUS	Euonymus spp.				
GAZANIA	Gazania spp.				
GERANIUM, HOUSE	Pelargonium hortorum				
HEATHER, FALSE	Cuphea hyssopifolia				
HOSTA	Hosta fortunei				
IRIS	Iris spp.				
JASMINE TOBACCO	Nicotiana alata				
LOOSESTRIFE	Lythrum salicaria				
MARIGOLD	Tagetes spp.				
PARTRIDGEBERRY	Mitchella repens				
PETUNIA*	Petunia hybrida				
PHLOX	Phlox spp.				
PINKS	Dianthus spp.				
PORTULACA	Portulaca grandiflora				
SALVIA	Salvia spp.				
SAXIFRAGE	Saxifraga spp.				
SEDUM	Sedum spp.				
SELLOUM	Philodendron selloum				
SNAPDRAGON*	Antirrhinum majus				
SWEET FLAG	Acorus gramineus				
TICKSEED	Coreopsis grandiflora				
TOUCH-ME-NOT	Impatiens spp.				
VERBENA	Verbena spp.				
VIOLET	Viola spp.				
YARROW, COMMON	Achillea millefolium				
ZINNIA	Zinnia elegans				

<sup>\*</sup> Slight foliage or flower speckling has been observed on these species.

### **SHRUBS**

COMMON NAME	SCIENTIFIC NAME
ABELIA	Abelia spp.
ANISE, PURPLE	Illicium floridanum
AUCUBA	Aucuba spp.
AZALEA*	Rhododendron spp.
BAMBOO	Bambusa spp.
BARBERRY, JAPANESE	Berberis thungergii
BARBERRY, MAGELLAN	Berberis buxifolia
BAYBERRY	Myrica pensylvanica
BOTTLEBRUSH	Callistemom citrinus
BOXWOOD, COMMON	Buxus sempervirens
CAMELLIA, COMMON	Camellia japonica
CANDYTUFT	Iberis sempervirens
CLEYERA	Cleyera japonica
CORALBERRY	Ardisia crenata
CRAPE MYRTLE	Lagerstroemia indica
COYOTE BRUSH	Baccharis pilularis
FIG, CREEPING	Ficus pumila
GARDENIA	Gardenia spp.

#### **SHRUBS**

p. indica ipp. ermum asiaticum ermum jasminoides pp.
indica pp. ermum asiaticum ermum jasminoides
indica pp. ermum asiaticum ermum jasminoides
ermum asiaticum ermum jasminoides
ermum jasminoides
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<sup>\*</sup>Slight foliage or flower speckling has been observed on these species.

#### **DIRECTIONS FOR ANNUAL GRASSES IN ORNAMENTALS**

- 1. Make application to actively growing grasses at specified weed heights.
- 2. Make application when the first grass weed species in a mixed grass weed population reaches the specified growth stage for treatment.
- 3. Use the higher rate under heavy grass pressure and/or when grasses are at maximum height.

#### **RESTRICTIONS:**

- Do not exceed the maximum rate per application listed in Crop Specific Use Directions.
- Do not exceed the maximum number of applications per year listed in Crop Specific Use Directions.
- Do not exceed the maximum yearly rate listed in Crop Specific Use Directions.
- Follow any additional application restrictions indicated in the Crop Specific Use Directions.

GRASS SPECIES	SCIENTIFIC NAME	WEED* HEIGHT (Inches)	RATE FL OZ/ ACRE <sup>1</sup>	HIGH RATE <sup>2</sup>
Barnyardgrass	Echinochloa crus-galli	2 – 8	8	16
Broadleaf Signalgrass	Brachiaria platyphylla	2 – 6	8	16
Brome				
California	Bromus carinatus	2-6	8	16
Cheat	Bromus secalinus	2 – 6	8	16
Downy	Bromus tectorum	2 – 6	8	16
Ripgut	Bromus diandrus	2 – 6	8	16
Canarygrass	Phalaris canariensis	1 – 4	8	16
Crabgrass	•			
Hairy	Digitaria adscendens	2 – 6**	8	16
Large	Digitaria sanguinalis	2 – 6**	8	16
Smooth	Digiteria ischaemum	2 – 6**	8	16
Southern	Digiteria ciliaris	2 – 6**	8	16
Crowfootgrass	Dactyloctenium aegyptium	2 – 6**	8	16
Fall Panicum	Panicum dichotomiflorum	2 – 8	8	16
Field Sandbur	Cenchrus incertus	2-6	8	16
Foxtail	•		•	
Giant	Setaria faberi	2 – 12	8	16
Green	Setaria viridis	2 – 8	8	16
Yellow	Setaria glauca	2 – 8	8	16
Goosegrass	Eleusine indica	2 – 6**	8	16
Itchgrass	Rottboellia cochin	2-6	8	16

GRASS SPECIES	SCIENTIFIC NAME	WEED* HEIGHT (Inches)	RATE FL OZ/ ACRE <sup>1</sup>	HIGH RATE <sup>2</sup>
Junglerice	Echinochloa colona	2 – 6	8	16
Lovegrass (Stinkgrass)	Eragrostis cilianensis	2 – 6	8	16
Rabbitsfootgrass	Polypogon monspeliensis	1 – 4	8	16
Red Rice	Oryza sativa	1 – 3	8	16
Ryegrass				
Hardy	Lolium remotum	2 – 6	8	16
Italian	Lolium multiflorum	2 – 6	8	16
Seedling Johnsongrass	Sorghum halepense	4 – 10	8	16
Shattercane	Sorghum bicolor	6 – 18	8	16
Southwestern Cupgrass	Eriochloa gracilis	2 – 6	8	16
Sprangletop				
Amazon	Leptochloa panicoides	2 – 6	8	16
Bearded	Leptochloa fascicularis	2 – 6	8	16
Mexican	Leptochloa uninervia	2 – 6	8	16
Red	Leptochloa filiformis	2 – 6	8	16
Texas Panicum	Panicum texanum	2 – 6	8	16
Volunteer Cereals				
Barley	Hordeum vulgare	2 – 6	8	16
Oats	Avena sativa	2 – 6	8	16
Rye	Secale cereale	2 – 6	8	16
Wheat	Triticum aestivum	2 – 6	8	16
Volunteer Corn	Zea mays	4 – 12	6	8
Volunteer Corn	Zea mays	12 – 24	8	16
Volunteer Grain Sorghum	Sorghum bicolor	8 – 12	8	16
Wild Oats	Avena fatua	2 – 6	8	16
Wild Proso Millet	Panicum miliaceum	2 – 10	8	16
Witchgrass	Panicum capillare	2 – 8	8	16
Woolly Cupgrass	Eriochloa villosa	2 – 8	8	16

<sup>\*</sup>Generally occurs between 3-leaf stage and tillering

Add a nonionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gallons (0.25% v/v).

#### **DIRECTIONS FOR PERENNIAL GRASSES IN ORNAMENTALS**

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

#### **RESTRICTIONS:**

- Do not exceed the maximum rate per application listed in Crop Specific Use Directions.
- Do not exceed the maximum number of applications per year listed in Crop Specific Use Directions.
- Do not exceed the maximum yearly rate listed in Crop Specific Use Directions.
- Follow any additional application restrictions indicated in the Crop Specific Use Directions.

GRASS SPECIES	WEED HEIGHT (inches)	RATE FL OZ/ ACRE <sup>1</sup>	HIGH RATE <sup>2</sup>
Bermudagrass (Cynodon dactylon)			
First Application	3 (or up to 6" runners)	8	16
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	8	16
Quackgrass (Elytrigia repens)	14.0		140
First Application	4 – 8	8	16
Repeat Application(s) (if regrowth occurs)	4 – 8	8	16
Rhizome Johnsongrass (Sorghum halepense)			
First Application	12 – 24	8	16
Repeat Application(s) (if regrowth occurs)	6 – 18	6	8

<sup>\*\*</sup>Length of lateral growth

 $<sup>^{\</sup>bar{1}}$ 8 fl oz/A = approximately 0.2 fl oz/1000 sq ft

<sup>&</sup>lt;sup>2</sup>16 fl oz/A = approximately 0.4 fl oz/1000 sq ft

GRASS SPECIES	WEED HEIGHT (inches)	RATE FL OZ/ ACRE <sup>1</sup>	HIGH RATE <sup>2</sup>	
Wirestem Muhly (Muhlenbergia frondosa)				
First Application	4 – 8	8	16	
Repeat Application(s) (if regrowth occurs)	4 – 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 nonionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gallons (0.25% v/v)

#### STORAGE AND DISPOSAL

**PESTICIDE STORAGE**: Store product in original container only. Store in a cool, dry place. Do not store diluted spray. Do not contaminate water, other pesticides, fertilizer, food or feed in storage or cleaning of equipment. Open dumping is prohibited.

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

#### **CONTAINER HANDLING:**

#### Containers equal to or less than 5 gallons: Nonrefillable container.

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

**Containers greater than 5 gallons: Nonrefillable container.** Do not reuse or refill this container. Triple-rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Offer for recycling, if available, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**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 procedure two more times.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.

#### **WARRANTY DISCLAIMER**

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