

CLETHODIM GROUP 1 HERBICIDE

SHADOW® 3EC

HERBICIDE

ACTIVE INGREDIENT:

Clethodim, (E)-2[1-[[[(3-chloro-2-propenyl)oxy]limino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one 36.7%

OTHER INGREDIENTS*: 63.3%

TOTAL: 100.0%

* Contains Petroleum Distillates Contains: 3.0 lbs Clethodim per gallon

EPA Reg. No. 70506-500

KEEP OUT OF REACH OF CHILDREN

CAUTION / PRECAUCIÓN

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.)

See front panel for First Aid Instructions and Booklet for complete Precautionary Statements and Directions For Use.

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give any liquid to the person. • DO NOT give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
NOTE TO PHYSICIAN: Contains petroleum distillates. Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid, which can cause aspiration pneumonitis.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR 24-HOUR MEDICAL EMERGENCY ASSISTANCE CALL Rocky Mountain Poison and Drug Safety: 1-866-673-6671. FOR 24-HOUR CHEMICAL EMERGENCY (Spill, leaks, fire, exposure, or accident) CALL CHEMTREC: 1-800-424-9300 or +1-703-527-3887.	

For Product Use Information Call: 1-800-438-6071

Net Contents: _____ Gallons

HERBICIDE

Produced For: UPL NA Inc. • 630 Freedom Business Center, Suite 402
King of Prussia, PA 19406 U.S.A. • 1-800-438-6071



PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION: Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants;
- Chemical-resistant gloves made of any waterproof material (nitrile rubber \geq 14 mils, butyl rubber \geq 14 mils, viton \geq 14 mils, and/or barrier laminate);
- Shoes plus socks; and
- Protective eyewear.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.

DO NOT reuse them.

User Safety Requirements

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.

ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

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

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

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

Wild Rice: Hays County, Texas

NON-TARGET ORGANISM ADVISORY STATEMENT

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent

to the treated area. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

Important.

Read these entire **DIRECTIONS FOR USE** and **WARRANTY AND DISCLAIMER STATEMENT** before using SHADOW® 3EC Herbicide.

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.

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

AGRICULTURAL USE REQUIREMENTS

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

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

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

- Coveralls;
- Chemical-resistant gloves made of any waterproof material (nitrile rubber \geq 14 mils, butyl rubber \geq 14 mils, viton \geq 14 mils, and/or barrier laminate);
- 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, forests, 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

SHADOW 3EC Herbicide is a selective postemergence herbicide for control of annual and perennial grasses. SHADOW 3EC Herbicide does not control sedges or broadleaf weeds. SHADOW 3EC Herbicide is a systemic herbicide which is translocated from the treated foliage to the growing points of the leaves, shoots and roots. Uptake into the plant is primarily through its leaves. Thorough coverage of the foliage is important for consistent grass 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. Avoid contact of this product with desirable grass crops, including corn, rice, sorghum, small grains, or turf as these and other grass crops will be injured or killed.

Herbicide Resistance Management

For resistance management, SHADOW 3EC Herbicide is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to SHADOW 3EC Herbicide and other Group 1 herbicides. Weed species with acquired resistance to Group 2 may eventually dominate the weed population if Group 2 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 SHADOW 3EC Herbicide or other Group 1 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field. Whenever possible incorporate multiple weed control practices including mechanical cultivation, biological management practices, and crop rotation.
- 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 application to identify the weed species present and their growth stage to determine if the intended application will be effective. Scout 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 including 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 (MOA), if available. Treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes. To the extent possible do not allow weed escapes to produce seeds, roots, or tubers.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank-mix products so that there are multiple effective mechanisms of action for each target weed. Contact UPL NA Inc. at 1-800-438-6071.

PRECAUTIONS

- See **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table for crop specific application rates and restrictions.
- 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 advised for use on vegetable crops being grown for seed production unless specific use directions are provided.
- While all the vegetable crops on this label have been tested and are resistant to SHADOW 3EC Herbicide, not all specialty varieties of these crops have been tested. Before applying SHADOW 3EC Herbicide to specialty varieties of vegetable crops on this label, it is advised that crop resistance be investigated first using a small section of the field. It is possible that injury symptoms can occur. Symptoms may appear as leaf speckling or stunting.
- Grass crops including corn, rice, sorghum, small grains, or turf, etc. are highly sensitive to SHADOW 3EC Herbicide.
- 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, including continuous no-tillage in which the perennial grass rhizomes or stolons are not cut up, result in a very staggered, non-uniform weed emergence. No fewer than two (2) SHADOW 3EC Herbicide applications per year are advised at the appropriate weed-growth stage rate under continuous no-till conditions, due to this non-uniform weed emergence.
- Tank-mixes of SHADOW 3EC Herbicide and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs, an additional application of this product may be necessary.

RESTRICTIONS

- Aerial applications for all tree fruits and tree nuts uses are prohibited.
- **DO NOT** plant any crop for 30 days after application unless SHADOW 3EC Herbicide is registered for use on that crop.
- **DO NOT** apply if rain is expected within 1 hour of application, as control may be unsatisfactory.
- Application on Long Island, New York in Nassau and Suffolk Counties of New York State is restricted to no more than 10.3 fl oz (0.242 lb ai) of SHADOW 3EC Herbicide per acre per year.
- **DO NOT** apply under conditions of stress. Applying SHADOW 3EC Herbicide 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 SHADOW 3EC Herbicide effectively, and will be less susceptible to herbicide activity.
- **DO NOT** apply a postemergence broadleaf herbicide within one day following application of SHADOW 3EC Herbicide or reduced grass control may result.

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 SHADOW 3EC Herbicide, 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, non-ionic 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.

APPLICATION INFORMATION

Make applications of SHADOW 3EC Herbicide postemergence to actively growing grasses according to the rate table specifications. Applications to grass plants exceeding specified growth stages could result in unsatisfactory control.

When irrigation is used to supplement limited rainfall in arid regions, apply SHADOW 3EC Herbicide 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 in arid regions. 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.

GROUND APPLICATION

To ensure complete coverage, it is essential to use sufficient spray volumes and pressure. Use a minimum of 5 gallons and a maximum of 40 gallons of spray solution per acre. Ten gallons per acre can improve grass control under certain conditions, including 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. Set spray pressures to reflect a minimum of 30 psi and a maximum of 60 psi at the nozzle. **DO NOT** use flood nozzles.

Spot Treatment

Mix 1/5% to 2/5% (0.22 oz to 0.45 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.

NOTE: If SHADOW 3EC Herbicide is applied as a spot treatment, **DO NOT** exceed the maximum rate allowed on a "per acre" basis or crop injury could occur. Care must be taken when SHADOW 3EC Herbicide is applied as a spot treatment to onions, garlic, shallots, or non-bearing food crops or crop injury could occur.

AERIAL 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 gallons.

For onions (dry bulbs), garlic or shallots (dry bulbs): **DO NOT** exceed 5.2 fl oz (0.121 lb ai)/A in a single application when applying by air. **DO NOT** exceed 2 applications per year on garlic and shallot. In California **DO NOT** exceed 2 applications per year on onion. Apply a minimum of 20 gallons of spray solution per acre when applying by air to onions, garlic or shallots in the state of California. In states other than California, make air applications to onions, garlic, and shallots in a minimum of 10 gallons per acre.

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

SPRAY DRIFT

Aerial Applications:

- **DO NOT** release spray at a height greater than 10 ft 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 airplane or 75% of the rotor blade diameter for helicopters.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Ground Boom Applications:

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

SPRAY DRIFT ADVISORIES

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

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size - Ground Boom

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

Controlling Droplet Size - Aircraft

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

BOOM HEIGHT - Ground Boom

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

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

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

WIND

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

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

SPRAY DRIFT MANAGEMENT

In addition to the above **SPRAY DRIFT** table and **SPRAY DRIFT ADVISORIES**, the following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements **DO NOT** apply to forestry applications, public health uses or to applications using dry formulations.

- The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- Nozzles must always point backward, parallel with the air stream and never be pointed downwards more than 45 degrees.

When applying SHADOW 3EC Herbicide in a tank-mix with other herbicides (e.g. 2,4-D, bromoxynil, MCPA, and sulfonyleurea herbicides) in eastern Washington, observe all applicable Washington State Department of Agriculture herbicide rules.

CHEMIGATION (SPRINKLER IRRIGATION APPLICATION)

ONIONS (dry bulbs) and GARLIC ONLY

May be applied to onions and garlic by sprinkler irrigation systems. Only apply to onions and garlic using chemigation.

DO NOT apply by chemigation to any other crop other than onions and garlic.

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

Make application of SHADOW 3EC Herbicide in 0.1 to 0.2 acre-inch of water, either at the end of a regular irrigation set or as a separate application not associated with a regular irrigation using the least amount of water that provides proper distribution and coverage. Application of more than label specified quantities of irrigation water per acre may result in decreased product performance by removing the chemical

from the zone of effectiveness. Use a metering device to inject the SHADOW 3EC Herbicide into the irrigation water at a constant flow. Constant agitation must be maintained in the chemical supply tank during the entire period of herbicide application. Inject the product with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. Allow time for all lines to flush the herbicide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of remaining herbicide, a dye indicator may be injected into the lines to mark the end of the application period.

DO NOT apply SHADOW 3EC Herbicide through an irrigation system connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regular serves an average of at least 25 individuals daily at least 60 days out of the year.

PRECAUTIONS

- Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move system(s). **DO NOT** apply this product through any other type of irrigation system.
- 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.

RESTRICTIONS

- **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.
- 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.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump; a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

ADDITION OF ADJUVANT OR CROP OIL CONCENTRATE

CROPS	ADJUVANT SPECIFICATIONS
Alfalfa; Clover; Corn, Field; Cotton; Fallow Land (and other non-producing agricultural areas); Mint (peppermint, tops and spearmint, tops); Peanuts; Potatoes; Soybeans; Sugar Beets; Sunflower (Crop Group 20B)	Unless otherwise specified*, 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. Alternatively, 0.25% v/v of non-ionic surfactant (NIS) may be used.** 1-to-2 qt/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 lb/A) may be added to SHADOW 3EC Herbicide applications in addition to the specified rate of crop oil concentrate or NIS. 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.
Artichoke (Globe); Beans & Peas, Dry Shelled (Crop Group 6C); Beans, Succulent Shelled (Crop Group 6B); <i>Brassica</i> , Head and Stem (Crop Group 5-16); <i>Brassica</i> , Leafy Greens (except radish (leaves), turnip (greens), watercress; Crop Group 4-16B); Bushberries (Crop Group 13-07B); Caneberries (Crop Group 13-07A); Canola; Carrot; Cranberry; Flax; Fruiting Vegetables (except tomato, okra; Crop Group 8-10); Garden Beets; Herbs (Crop Group 19A); Hops; Head and Stem Leafy Greens (Crop Group 4-16A); Leaf Petioles (Crop Group 22B); Edible Poddled Legume Vegetables (Crop Group 6A); Melons (Crop Group 9A); Mustard Seed; Mustard Spinach; Okra; Onions, Dry Bulb (Crop Group 3-07A); Onions, Green (Crop Group 3-07B); Radishes and Radish Leaves; Root Vegetables (except carrot, garden beet, radish, sugar beet; Crop Group 1B); Safflower; Sesame; Squash/Cucumber (Crop Group 9B); Stalk and Stem Vegetables (Crop Group 22A); Strawberries; Tomatoes; Tuberous and Corm Vegetables (except potato; Crop Group 1C); Turnip Greens; Watercress	Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pint per 50 gallons (0.25% v/v). DO NOT add a liquid fertilizer for these crops.
Berry, Low Growing (except cranberry, strawberry; Crop Group 13-07G); Pome Fruit (Crop Group 11-10); Stevia (dried leaves); Stone Fruit (Crop Group 12-12); Tree Nuts (Crop Group 14-12); Conifer Trees; Ornamental Plants and Non-Bearing Fruit and Nut Crops	Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pint per 50 gallons (0.25% v/v). DO NOT use a crop oil concentrate as it could injure flowers and foliage.
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.

* For clover and field corn **DO NOT** use a crop oil concentrate.

** Non-ionic surfactant (NIS) in this case refers to an adjuvant containing at least 80% non-ionic surfactant. Crop oil concentrate in this case refers to both crop oil concentrate and crop oil concentrate blends. Acceptable crop oil concentrates would be those that contain a minimum of 80% oils and 15% emulsifier. Acceptable crop oil concentrate blends would be those that contain a minimum of 60% oils and 25 - 40% surfactants and emulsifiers. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all the following criteria: be non-phytotoxic, contain only EPA-exempt ingredients, provide good mixing quality and be successful in local experience. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. This product may be applied to seedling or established alfalfa grown for seed, hay, silage, green chop or direct grazing.

The use of adjuvants can increase crop injury of tank-mix partners. Consult the tank-mix partner label for further guidance.

When an adjuvant is to be used with this product, UPL NA Inc. advises the use of a Chemical Producers and Distributors Association certified adjuvant.

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Alfalfa Established⁵ <i>including:</i> Birdsfoot Trefoil Holy Clover Sainfoin	15 days before grazing, feeding or harvesting (cutting) for forage or hay	Annual Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v OR Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	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. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT apply SHADOW 3EC Herbicide 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.
Alfalfa Seedling⁵	15 days before grazing, feeding or harvesting (cutting) for forage or hay	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v OR Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	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. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT apply SHADOW 3EC Herbicide 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.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Artichoke (Globe)* * Not for use in California.	5 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Beans, Dry Shelled (Crop Group 6C) <i>including:</i> Bean (<i>Lupinus</i> spp.) Grain Sweet White White Sweet Bean (<i>Phaseolus</i> spp.) Field Kidney Lima (dry) Navy Pinto Tepary Bean (<i>Vigna</i> spp.) Adzuki Bean Blackeyed Pea Catjang Cowpea Crowder Pea Moth Bean Mung Bean Rice Bean Southern Pea Urd Bean Broad (dry) Bean Chickpea (garbanzo) Guar Lablab Bean Lentil	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v	For reduced rates for the control of small annual grasses, refer to the appropriate section. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 4 applications at 2.6 fl oz (0.061 lb ai) per acre per year. (Not approved for this use in California.) • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Bean, Succulent Shelled (Crop Group 6B) <i>including:</i> Bean (<i>Phaseolus</i> spp.) Lima Bean (green) Broad Bean (succulent) Bean (<i>Vigna</i> spp.) Black-eyed Pea Cowpea Southern Pea	21 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	For reduced rates for the control of small annual grasses, refer to the appropriate section. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 1 application per year. • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per year. • For Reduced Rate Control for Small Annual Grasses: DO NOT make more than 2 applications at 2.6 fl oz (0.061 lb ai) per acre per year. (Not approved for this use in California.) • For Reduced Rate Control for Small Annual Grasses: DO NOT make repeat applications less than 14-days apart.
Berry, Low Growing (except cranberry, strawberry) (Crop Group 13-07G) <i>including:</i> Bearberry Bilberry Blueberry, Lowbush Cloudberry Lingonberry Muntries Partridgeberry Cultivars, varieties and/or hybrids of these commodities.	45 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	Verify Crop safety to SHADOW 3EC Herbicide on a small area of the crop, at the desired SHADOW 3EC Herbicide rate and with the same Non-ionic Surfactant (NIS) that will be used on the field. If no crop response is evident 7 days after treatment, SHADOW 3EC Herbicide may be used on the entire field at the rate tested and with the same NIS used in the crop safety test. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT use a crop oil concentrate as injury to flower and foliage may occur.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Brassica, Head & Stem Vegetables (Crop Group 5-16) <i>including:</i> Broccoli Brussels Sprouts Cabbage Chinese (Napa) Cabbage Cauliflower Cultivars, varieties and/or hybrids of these commodities.	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Brassica, Leafy Greens (except radish (leaves), turnip (greens), watercress) (Crop Group 4-16B) <i>including:</i> Arugula Broccoli, Chinese Broccoli Raab Cabbage, Abyssinian Cabbage, Chinese (Bok Choy) Cabbage, Seakale Collards Cress, Garden Cress, Upland Hanover Salad Kale Maca (leaves) Mizuna Mustard Greens Rape Greens Rocket, Wild Shepherd's Purse Cultivars, varieties and/or hybrids of these commodities.	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Bushberry (Crop Group 13-07B)* <i>including:</i> Aronia Berry Blueberry, Highbush Chilean Guava Currant, Black Currant, Buffalo Currant, Native Currant, Red Elderberry European Barberry Gooseberry Honeysuckle, Edible Huckleberry Jostaberry Juneberry (Saskatoon Berry) Salal Sea Buckthorn Cultivars, varieties and/or hybrids of these commodities. * Not for use in California.	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	Refer to tank-mix partners for specific directions and restrictions. Direct the application towards the base of the plant to avoid contact with leaf tissue. Contact with the upper portions of the plant can result in crop injury. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT apply for Bushberry grown for root stock.
Caneberry (Crop Group 13-07A)* <i>including:</i> Blackberry Loganberry Raspberry Raspberry, Black Raspberry, Red Wild Raspberry Cultivars, varieties and/or hybrids of these commodities. * Not for use in California.	7 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	Direct the application towards the base of the plant to avoid contact with leaf tissue. Contact with the upper portions of the plant can result in crop injury. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT apply for Caneberry grown for root stock.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Canola (Rapeseed) (except flax seed, mustard seed, sesame seed; Crop Group 20A)* <i>including:</i> Borage Crambe Cuphea Echium Gold of Pleasure (Camelina) Hare's Ear Mustard Lesquerella Lunaria Meadowfoam Milkweed Oil Radish Poppy Seed Rapeseed (Canola) Sweet Rocket Cultivars, varieties and/or hybrids of these commodities. * Not for use in California.	70 days	Annual Grasses: 2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) Perennial Grasses: 3.9 fl oz (0.091 lb ai)	Non-Ionic Surfactant: 0.25% v/v	Verify Crop safety to SHADOW 3EC Herbicide on a small area of the crop, at the desired SHADOW 3EC Herbicide rate and with the same Non-ionic Surfactant (NIS) that will be used on the field. If no crop response is evident 7 days after treatment, SHADOW 3EC Herbicide may be used on the entire field at the rate tested and with the same NIS used in the crop safety test. Crop injury may occur when this product is applied during the bloom period. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 3.9 fl oz (0.091 lb ai) per acre per application. • DO NOT apply more than 1 application per acre per year. • DO NOT apply more than 3.9 fl oz (0.091 lb ai) per acre per year. • For Reduced Rate Control of Small Annual Grasses: DO NOT apply more than 1 application at 2.6 fl oz (0.061 lb ai) per acre per year. • DO NOT apply after crop has begun bolting.
Carrot	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Clover	15 days before grazing, feeding, or harvesting (cutting) for forage or hay.	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	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: <ul style="list-style-type: none"> • For use on clover grown in the states of Idaho, Oregon and Washington only. • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 2 applications per year. • For perennial grasses, DO NOT apply more than 1 application per year. • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Conifer Trees	N/A	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v OR Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	For use on Christmas tree farms, conifer nurseries and conifer plantations (but not in forests). RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For perennial grasses, DO NOT apply more than 2 applications per year. • For annual grasses, DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Corn, Field <i>for replanting or cleanup</i>	90 days	Annual Grasses: 1.9 fl oz (0.045 lb ai) Perennial Grasses: -	Non-Ionic Surfactant: 0.25% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	To control existing stand, replant no sooner than 6 days after application. 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: <ul style="list-style-type: none"> • DO NOT apply more than 1.9 fl oz (0.045 lb ai) per acre per application. • DO NOT apply more than 1 application per year. • DO NOT apply more than 1.9 fl oz (0.045 lb ai) per acre per year. • DO NOT use Crop Oil Concentrate or Methylated Seed Oil.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Cotton <i>including:</i> (Crop Group 20C) Cotton Grown for Seed Cultivars, varieties, and/or hybrids of these.	60 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v OR Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	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. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT graze treated fields or feed treated forage or hay to livestock.
Cranberry	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT apply between the “hook” stage and full fruit set.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Fallow Land (and other non-producing agricultural areas)	N/A	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v OR Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	<p>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. Refer to tank-mix partners for specific directions and restrictions.</p> <p>RESTRICTIONS:</p> <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre 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. • 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 flood jet nozzles. • DO NOT mow area for two (2) weeks prior to or after the SHADOW 3EC Herbicide application.
Flax* * Not for use in California.	60 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	<p>Make application prior to bloom. If applied during bloom, crop injury could occur. Refer to tank-mix partners for specific directions and restrictions.</p> <p>RESTRICTIONS:</p> <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 2 applications per year. • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per year. • For Reduced Rate Control for Small Annual Grasses: DO NOT apply more than 4 applications at 2.6 fl oz (0.061 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Fruiting Vegetables (except tomato, okra) (Crop Group 8-10) <i>including:</i> African Eggplant Bush Tomato Cocona Currant Tomato Eggplant Garden Huckleberry Goji Berry Groundcherry Martynia Naranjilla Pea Eggplant Pepino Pepper, Bell Pepper, Non-bell Roselle Scarlet Eggplant Sunberry Tomatillo Tree Tomato Cultivars, varieties, and/or hybrids of these.	20 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Garden Beets	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Herbs (Crop Group 19A) <i>including:</i> Angelica Balm Basil Borage Burnet Chamomile Catnip Chervil (dried) Chive Chinese Chive Clary Coriander (leaf) Costmary Culantro (leaf) Curry (leaf) Dill (dillweed) Horehound Hyssop Lavender Lemongrass Lovage (leaf) Marigold Marjoram (<i>Origanum</i> spp.) Nasturtium Parsley (dried) Pennyroyal Rosemary Rue Sage Savory, Summer Savory, Winter Sweet Bay Tansy Tarragon Thyme Wintergreen Woodruff Wormwood	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	<p>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.</p> <p>Verify Crop safety to SHADOW 3EC Herbicide on a small area of the crop, at the desired SHADOW 3EC Herbicide rate and with the same Non-ionic Surfactant (NIS) that will be used on the field. If no crop response is evident 7 days after treatment, SHADOW 3EC Herbicide may be used on the entire field at the rate tested and with the same NIS used in the crop safety test.</p> <p>RESTRICTIONS:</p> <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Hops	21 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	<p>RESTRICTIONS:</p> <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Head and Stem Leafy Greens (Crop Group 4-16A) <i>including:</i> Amaranth, Chinese Spinach Amaranth, Leafy Aster Indian Blackjack Cat's Whiskers Cham-Chwi Cham-Na-Mul Chervil (fresh leaves) Chipilin Chrysanthemum, Garland Cilantro (fresh leaves) Corn Salad Cosmos Dandelion (leaves) Dang-Gwi (leaves) Dillweed Dock (Sorrel) Dol-Nam-Mul Ebolo Endive (Escarole) Fameflower Feather Cockscomb Good King Henry Huauzontle Jute (leaves) Lettuce, Bitter Lettuce, Head Lettuce, Leaf Orach Parsley (fresh leaves) Plantain, Buckhorn Primrose, English Purslane, Garden Purslane, Winter Radicchio (Red Chicory) Spinach Spinach, Malabar Spinach, New Zealand Spinach, Tanier Swiss Chard Violet, Chinese (leaves) Cultivars, varieties, and/or hybrids of these.	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Leaf Petioles (Crop Group 22B) <i>including:</i> Cardoon Celery Chinese Celery Fuki Rhubarb Udo Zuiki Cultivars, varieties, and/or hybrids of these.	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Edible Podded Legume Vegetables (Crop Group 6A) <i>including:</i> Bean (<i>Phaseolus</i> spp.) Runner Snap Wax Bean (<i>Vigna</i> spp.) Asparagus Chinese Longbean Moth Yardlong Jackbean Pea (<i>Pisum</i> spp.) Dwarf Edible-pod Snow Sugar Snap Pigeon Pea Soybean (Edamame; immature seed) Sword Bean	21 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 1 application per year. • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per year. • For peas apply before bloom, but no later than 21 days before harvest.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Melons (Crop Group 9A) <i>including:</i> Citron Melon Muskmelon hybrids and/or cultivars of <i>Cucumis melo</i> : True Cantaloupe Cantaloupe Casaba Crenshaw Melon Golden Pershaw Melon Honeydew Melon Honey Balls Mango Melon Persian Melon Pineapple Melon Santa Claus Melon Snake Melon Watermelon hybrids and/or varieties of <i>Citrullus lanatus</i> .	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Mint Peppermint (tops) Spearmint (tops)	21 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v OR Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	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. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Mustard Seed* * Not for use in California.	75 days	Annual Grasses: 2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) Perennial Grasses: 3.9 fl oz (0.091 lb ai)	Non-Ionic Surfactant: 0.25% v/v	If applied during the bloom period, crop injury may occur. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 3.9 fl oz (0.091 lb ai) per acre per application. • DO NOT apply more than 1 application per year. • DO NOT apply more than 3.9 fl oz (0.091 lb ai) per acre per year. • For Reduced Rate Control of Small Annual Grasses: DO NOT apply more than 1 applications at 2.6 fl oz (0.061 lb ai) per acre per year. • DO NOT apply after crop has begun bolting.
Mustard Spinach	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Non-Bearing Food Crops	N/A	2.9 - 5.2 fl oz (0.068 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	<p>For reduced rates for the control of small annual grasses, refer to the appropriate section.</p> <p>Crop injury to non-bearing fruit and nut crops can occur if SHADOW 3EC Herbicide is improperly applied. SHADOW 3EC Herbicide must not be applied directly over the top of these plant types. Instead, direct spray at the base of the plant where grassy weeds are growing near the ground.</p> <p>RESTRICTIONS:</p> <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • Sugar Maples cannot be tapped for syrup within one year of application. • DO NOT APPLY SHADOW 3EC HERBICIDE TO NON-BEARING FRUIT OR NUT CROPS GROWN FOR ROOT STOCK. • If this product is applied as a spot treatment to non-bearing fruit and nut crops, DO NOT exceed the maximum rate allowed on a “per acre” basis. • DO NOT use a crop oil concentrate as injury to flower and foliage may occur. • Aerial applications for all tree fruits and tree nuts uses are prohibited.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Non-Crop or Non-Planted Areas	N/A	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v	<p>The following areas are considered non-crop or non-planted areas: rights-of-way, 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; beneath greenhouse benches; around golf courses.</p> <p>RESTRICTIONS:</p> <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications at 5.2 fl oz (0.121 lb ai) per acre per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • Other than the crop oil identified, DO NOT apply as part of a tank-mix when applying this product for grass suppression. • DO NOT plant any crop for 30 days following application unless clethodim is registered for use on that crop.
Okra* * Not for use in California.	3 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	<p>RESTRICTIONS:</p> <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Onions, Dry Bulb (Crop Group 3-07A) <i>including:</i> Daylily (bulb) Fritillaria (bulb) Garlic (bulb) Garlic, Great-headed (bulb) Garlic, Serpent (bulb) Lily (bulb) Onion (bulb) Onion, Chinese (bulb) Onion, Pearl Onion, Potato (bulb) Shallot (bulb) Cultivars, varieties, and/or hybrids of these.	45 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v	Minimum 20 gal/A spray volume by ground in entire U.S. Minimum 20 gal/A spray volume by air in California. ⁽⁹⁾ States Other than California: Make application by air to onions, garlic or shallots in a minimum of 10 gals/A. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • When applying by air, DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application and 10.3 fl oz (0.242 lb ai) per acre per year. • If this product is applied as a spot treatment to onion or garlic, DO NOT exceed the maximum rate allowed on a “per acre” basis. • In California, DO NOT apply this product to garlic or onion until the crop has at least two full leaves. Use a 14 day spray interval between the application of this product and liquid nitrogen or other herbicide applications. Injury to crop may occur when shorter intervals are observed.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Onions, Green (Crop Group 3-07B) <i>including:</i> Chive (fresh leaves) Chive, Chinese (fresh leaves) Elegans Hosta Fritillaria (leaves) Kurrat Lady's Leek Leek Leek, Wild Onion, Beltsville Bunching Onion, Fresh Onion, Green Onion, Macrostem Onion, Tree (tops) Onion, Welsh (tops) Shallot (fresh leaves) Cultivars, varieties, and/or hybrids of these.	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	Minimum 20 gal/A spray volume by air in California. States Other than California: Make application by air to onions, garlic or shallots in a minimum of 10 gals/A. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • If this product is applied as a spot treatment to onion or garlic, DO NOT exceed the maximum rate allowed on a "per acre" basis. • In California for air applications to onion, DO NOT apply more than 2 applications per year. • In California, DO NOT apply this product to onion or garlic until the crop has at least two full leaves. Use a 14 day spray interval between the application of this product and liquid nitrogen or other herbicide applications. Injury to crop may occur when shorter intervals are observed.
Ornamentals	N/A	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v	For ornamental plant uses, this product can be used to control labeled grass weeds in greenhouses, lathhouses, shadehouses, and around outdoor ornamentals, including nurseries, parks, roadside plantings, and structure landscapes. The plants listed in the following tables have been tested for crop safety with this product. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT use a crop oil concentrate as injury to flower and foliage may occur.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Pea, Dry Shelled (Crop Group 6C) <i>including:</i> Pea (<i>Pisum</i> spp.) Field Pigeon Pea	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	Applications of this product to peas during the bloom period may result in severe crop injury, including loss of yield and delayed maturity. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 1 application per year. • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per year. • Apply before bloom, but no later than 30 days prior to harvest. • For Reduced Rate Control of Small Annual Grasses: DO NOT make more than 2 applications at 2.6 fl oz (0.061 lb ai) per acre per year. (Not approved for this use in California.) • For Reduced Rate Control for Small Annual Grasses: DO NOT make repeat applications less than 14-days apart.
Pea, Succulent Shelled (Crop Group 6B) <i>including:</i> Pea (<i>Pisum</i> spp.) English Garden Green Pigeon Pea	21 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	Applications of this product to peas during the bloom period may result in severe crop injury, including loss of yield and delayed maturity. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 1 application per year. • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per year. • Apply before bloom, but no later than 21 days prior to harvest. • For Reduced Rate Control of Small Annual Grasses: DO NOT apply more than 2 applications at 2.6 fl oz (0.061 lb ai) per acre per year. • For Reduced Rate Control for Small Annual Grasses: DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Peanut <i>including:</i> perennial	40 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v OR Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	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. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none">• DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application.• DO NOT apply more than 2 applications per year.• DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year.• DO NOT make repeat applications less than 14-days apart.
Pome Fruit (Crop Group 11-10) <i>including:</i> Apple Azarole Crabapple Loquat Mayhaw Medlar Pear Pear, Asian Quince Quince, Chinese Quince, Japanese Tejocote Cultivars, varieties, and/or hybrids of these.	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none">• DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application.• DO NOT apply more than 4 applications per year.• DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year.• DO NOT make repeat applications less than 14-days apart.• DO NOT use a crop oil concentrate as injury to flower and foliage may occur.• Aerial application to tree fruits is prohibited.
Potato	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v OR Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	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: <ul style="list-style-type: none">• DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application.• DO NOT apply more than 2 applications per year.• DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year.• DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Radish Radish (leaves)	15 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 2 applications per year. • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Root Vegetables (except carrot, garden beet, radish, sugar beet) (Crop Group 1B) <i>including:</i> Burdock (edible) Celeriac Chervil (turnip-rooted) Chicory Ginseng Horseradish Parsley (turnip-rooted) Parsnip Radish, Oriental Rutabaga Salsify Salsify, Black Salsify, Spanish Skirret Turnip	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Safflower	70 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Sesame	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT apply during flowering.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Soybean	60 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v OR Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	<p>Refer to appropriate section for the control of small annual grasses.</p> <p>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.</p> <p>Refer to tank-mix partners for specific directions and restrictions.</p> <p>RESTRICTIONS:</p> <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • For Reduced Rate Control of Small Annual Grasses: DO NOT apply more than 4 applications at 2.6 fl oz (0.061 lb ai) per acre per year. • DO NOT graze treated fields or feed treated forage or hay to livestock.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Squash/Cucumber (Crop Group 9B) <i>including:</i> Chayote (fruit) Chinese Waxgourd Cucumber Gherkin Gourd (edible) Hyotan Cucuzza Hechima Chinese Okra <i>Momordica</i> spp. Basalm Apple Basalm Pear Bitter Melon Chinese Cucumber Pumpkin Squash, Summer Crookneck Scallop Straightneck Vegetable Marrow Zucchini Squash, Winter Butternut Calabaza Hubbard Acorn Spaghetti	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Stalk and Stem Vegetables (Crop Group 22A) <i>including:</i> Agave Aloe Vera Asparagus Bamboo, Shoots Celtuce Fennel, Florence (fresh leaves, stalk) Fiddlehead Fern (edible) Kale, Sea Kohlrabi Palm Hearts Prickly Pear (pads) Prickly Pear, Texas (pads) Cultivars, varieties, and/or hybrids of these.	1 day	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Stevia (dried leaves)	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-ionic Surfactant: 0.25% v/v	<p>This product has not been tested on all varieties. It is the responsibility of the user to test this product on a small portion of the crop to be treated before treating the entire field. Verify Crop safety to SHADOW 3EC Herbicide on a small area of the crop, at the desired SHADOW 3EC Herbicide rate and with the same Non-ionic Surfactant (NIS) that will be used on the field. If no crop response is evident 7 days after treatment, SHADOW 3EC Herbicide may be used on the entire field at the rate tested and with the same NIS used in the crop safety test.</p> <p>RESTRICTIONS:</p> <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT use a crop oil concentrate as injury to flower and foliage may occur.
Stone Fruit (Crop Group 12-12) <i>including:</i> Apricot Apricot, Japanese Capulin Cherry, Black Cherry, Nanking Cherry, Sweet Cherry, Tart Jujube, Chinese Nectarine Peach Plum Plum, American Plum, Beach Plum, Canada Plum, Cherry Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Klamath Plum, Prune Plumcot Sloe Cultivars, varieties, and/or hybrids of these.	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-ionic Surfactant: 0.25% v/v	<p>Refer to tank-mix partners for specific directions and restrictions.</p> <p>RESTRICTIONS:</p> <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT use a crop oil concentrate as injury to flower and foliage may occur. • Aerial application to tree fruits is prohibited.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Strawberry	4 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Sugar Beet	40 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v OR Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	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. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • For Reduced Rate Control of Small Annual Grasses: DO NOT apply more than 4 applications at 2.6 fl oz (0.061 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Sunflower (Crop Group 20B) <i>including:</i> Calendula Castor Oil Plant Chinese Tallowtree Euphorbia Evening Primrose Jojoba Niger Seed Rose Hip Safflower Stokes Aster Sunflower Tallowwood Tea Oil Plant Vernonia Cultivars, varieties, and/or hybrids of these.	70 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v OR Crop Oil Concentrate/ Methylated Seed Oil: 1 qt/A or 1% v/v + Ammonium Sulfate⁴: 2.5 - 4 lb/A	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. Verify Crop safety to SHADOW 3EC Herbicide on a small area of the crop, at the desired SHADOW 3EC Herbicide rate and with the same Non-ionic Surfactant (NIS) that will be used on the field. If no crop response is evident 7 days after treatment, SHADOW 3EC Herbicide may be used on the entire field at the rate tested and with the same NIS used in the crop safety test. Refer to tank-mix partners for specific directions and restrictions. RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • For Reduced Rate Control of Small Annual Grasses: DO NOT apply more than 4 applications at 2.6 fl oz (0.061 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Tomato	20 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Tree Nuts (Crop Group 14-12) <i>including:</i> African Nut-Tree Almond Beechnut Brazil Nut Brazilian Pine Bunya Bur Oak Butternut Cajou Nut Candlenut Cashew Chestnut Chinquapin Coconut Coquito Nut Dika Nut Ginkgo Guiana Chestnut Hazelnut (Filbert) Heartnut Hickory Nut Japanese Horse-Chestnut Macadamia Nut Mongongo Nut Monkey-Pot Monkey Puzzle Nut Okari Nut Pachira Nut Peach Palm Nut Pecan Pequi Pili Nut Pine Nut Pistachio Sapucaia Nut Tropical Almond Walnut, Black Walnut, English Yellowhorn Cultivars, varieties, and/or hybrids of these.	14 days	Annual Grasses: 2.9 - 10.3 fl oz (0.068 - 0.242 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • In California, DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 41.4 fl oz (0.97 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT use a crop oil concentrate as injury to flower and foliage may occur. • Aerial application to tree nuts is prohibited.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Tuberous and Corm Vegetables (except potato) (Crop Group 1C) <i>including:</i> Arracacha Arrowroot Artichoke, Chinese Artichoke, Jerusalem Canna (edible) Cassava, Bitter Cassava, Sweet Chayote (Root) Chufa Dasheen Ginger Leren Sweet Potato Tanier Tumeric Yam Bean Yam, True	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.
Turnip Greens	14 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart.

(continued)

CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE

CROPS ¹	APPLICATION TIMING AND PRE-HARVEST INTERVAL (PHI)	USE RATES PER ACRE ²	ADJUVANT RATES PER ACRE ³	SPECIAL USE INSTRUCTIONS
Watercress* * Not for use in California.	30 days	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	Non-Ionic Surfactant: 0.25% v/v	RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 5.2 fl oz (0.121 lb ai) per acre per application. • DO NOT apply more than 4 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT apply when watercress is under flood conditions. • DO NOT apply this product when water is in the field and hold water for at least 24 hours after an application.

N/A - Not Applicable

¹ SHADOW 3EC Herbicide is not for use on vegetable crops being grown for seed production unless specific use directions are provided.

² See annual and perennial grass control tables for specific use rates.

³ Non-ionic surfactant (NIS) in this case refers to an adjuvant containing at least 80% non-ionic surfactant. Crop oil concentrate in this case refers to both crop oil concentrate and crop oil concentrate blends. Acceptable crop oil concentrates would be those that contain a minimum of 80% oils and 15% emulsifier. Acceptable crop oil concentrate blends would be those that contain a minimum of 60% oils and 25 - 40% surfactants and emulsifiers. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all the following criteria: be non-phytotoxic, contain only EPA-exempt ingredients, provide good mixing quality and be successful in local experience. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. This product may be applied to seedling or established alfalfa grown for seed, hay, silage, green chop or direct grazing.

⁴ Use spray grade ammonium sulfate. The use of ammonium sulfate does not take the place of the required adjuvant.

IMPORTANT

Plant resistance to SHADOW 3EC Herbicide at labeled rates has been found to be acceptable for the indicated genera and species listed below. Due to variability within species, crop growth stage, environmental conditions, and application techniques, it is advised that the user determine if the herbicide can be used safely on a few plants prior to widespread application. Neither the seller nor the manufacturer of SHADOW 3EC Herbicide has investigated the safety factor to plants not listed on this label.

**INSTRUCTIONS FOR ANNUAL GRASSES
(EXCEPT FOR IN ESTABLISHED ALFALFA AND MINT (PEPPERMINT, TOPS; SPEARMINT, TOPS))**

- 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 the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.
- **DO NOT** exceed the maximum rate per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.
- **DO NOT** exceed the maximum number of applications per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* (INCHES)	RATE ⁽¹⁾ FL OZ/A	
Barnyardgrass	<i>Echinochloa crus-galli</i>	2 to 8	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Brome				
California	<i>Bromus carinatus</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Cheat	<i>Bromus secalinus</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Downy	<i>Bromus tectorum</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Ripgut	<i>Bromus diandrus</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Canarygrass	<i>Phalaris canariensis</i>	1 to 4	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Crabgrass				
Hairy	<i>Digitaria adscendens</i>	2 to 6**	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Large	<i>Digitaria sanguinalis</i>	2 to 6**	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Smooth	<i>Digitaria ischaemum</i>	2 to 6**	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Southern	<i>Digitaria ciliaris</i>	2 to 6**	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	2 to 6**	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Fall Panicum	<i>Panicum dichotomiflorum</i>	2 to 8	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Field Sandbur	<i>Cenchrus incertus</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Foxtail				
Giant	<i>Setaria faberi</i>	2 to 12	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Green	<i>Setaria viridis</i>	2 to 8	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Yellow	<i>Setaria glauca</i>	2 to 8	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Goosegrass	<i>Eleusine indica</i>	2 to 6**	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Itchgrass	<i>Rottboellia cochinchinensis</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Junglerice	<i>Echinochloa colona</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Lovegrass (Stinkgrass)	<i>Eragrostis cilianensis</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Rabbitsfootgrass	<i>Polypogon monspeliensis</i>	1 to 4	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Red Rice	<i>Oryza sativa</i>	1 to 3	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Ryegrass				
Hardy	<i>Lolium remotum</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Italian***	<i>Lolium multiflorum</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Seedling Johnsongrass***	<i>Sorghum halepense</i>	4 to 10	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)

(continued)

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* (INCHES)	RATE ⁽¹⁾ FL OZ/A	
Shattercane	<i>Sorghum bicolor</i>	6 to 18	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Southwestern Cupgrass	<i>Eriochloa gracilis</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Sprangletop				
Amazon	<i>Leptochloa panicoides</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Bearded	<i>Leptochloa fascicularis</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Mexican	<i>Leptochloa uninervia</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Red	<i>Leptochloa filiformis</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Texas Panicum	<i>Panicum texanum</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Volunteer Cereals⁽³⁾				
Barley	<i>Hordeum vulgare</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Oats	<i>Avena sativa</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Rye	<i>Secale cereale</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Wheat ⁽²⁾	<i>Triticum aestivum</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Volunteer Corn^(2,3)	<i>Zea mays</i>	4 to 12	2.6 (0.061 lb ai)	3.9 (0.091 lb ai)
Volunteer Corn⁽³⁾	<i>Zea mays</i>	12 to 24	2.9 (0.068 lb ai)	4.5 (0.106 lb ai)
Volunteer Corn^(2,3)	<i>Zea mays</i>	24 to 36	3.9 (0.091 lb ai)	5.2 (0.121 lb ai)
Volunteer Grain Sorghum	<i>Sorghum bicolor</i>	8 to 12	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Wild Oats	<i>Avena fatua</i>	2 to 6	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Wild Proso Millet	<i>Panicum miliaceum</i>	2 to 10	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Witchgrass	<i>Panicum capillare</i>	2 to 8	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Woolly Cupgrass	<i>Eriochloa villosa</i>	2 to 8	2.9 (0.068 lb ai)	5.2 (0.121 lb ai)

* Generally occurs between 3-leaf stage and tillering.

** Length of lateral growth.

*** Non-ACC resistant.

⁽¹⁾ Rates higher than 5.2 fl oz (0.121 lb ai) per acre may be applied in certain geographic areas, cropping situations, or environmental conditions, where experience has shown that higher rates are needed for satisfactory control of annual grasses. In these situations, rates from 5.2 to 10.3 fl oz (0.121 to 0.242 lb ai) per acre may be applied.

⁽²⁾ When a cereal grain crop (including wheat) is interseeded for crop establishment or is planted as wind breaks to aid crop establishment, the minimum SHADOW 3EC Herbicide use rate for control is 3.9 fl oz (0.091 lb ai) per acre.

⁽³⁾ Includes glyphosate, glufosinate, and imidazoline resistant corn. Does not include sethoxydim resistant corn.

INSTRUCTIONS FOR ANNUAL & PERENNIAL GRASS CONTROL IN ESTABLISHED ALFALFA AND MINT (PEPPERMINT, TOPS & SPEARMINT, TOPS) WITH SHADOW 3EC HERBICIDE

GRASS SPECIES	WEED STAGE	RATE
See INSTRUCTIONS FOR ANNUAL GRASSES (EXCEPT FOR IN ESTABLISHED ALFALFA AND MINT) table and INSTRUCTIONS FOR PERENNIAL GRASSES table.	See INSTRUCTIONS FOR ANNUAL GRASSES (EXCEPT FOR IN ESTABLISHED ALFALFA AND MINT) table and INSTRUCTIONS FOR PERENNIAL GRASSES table.	See CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS FOR SHADOW 3EC HERBICIDE table.

RESTRICTIONS:

- **DO NOT** exceed the maximum rate per application listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.
- **DO NOT** exceed the maximum rate per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.
- **DO NOT** exceed the maximum number of applications per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.

Mowing: Achieving the best control of annual grasses can be made by applying SHADOW 3EC Herbicide 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 SHADOW 3EC Herbicide for partial or complete control.

Irrigated Alfalfa and Mint: Irrigation practices can be very critical to the successful use of SHADOW 3EC Herbicide 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 SHADOW 3EC Herbicide in a minimum of 10 GPA.

Annual Grass Control: Make application at the grass sizes indicated in the Annual Grass table and rates indicated. 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 SHADOW 3EC Herbicide 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, including frost, slower plant growth, or the onset of flowering.

Perennial Grass Control: SHADOW 3EC Herbicide effectively controls perennial grasses, including Bermudagrass, Johnsongrass, quackgrass, wirestem muhly, tall fescue, foxtail barley and orchardgrass. Due in part to lack of tillage, perennial grasses are more difficult to control in a perennial crop, including established alfalfa or 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 higher rate under heavy grass pressure and/or when grasses are at or near maximum height.

INSTRUCTIONS FOR ANNUAL BLUEGRASS CONTROL WITH SHADOW 3EC HERBICIDE

GRASS SPECIES	WEED STAGE	RATE FL OZ/A	
Annual Bluegrass (<i>Poa annua</i>)	1 to 4-leaf	3.9* (0.091 lb ai)	10.3** (0.242 lb ai)

RESTRICTIONS:

- **DO NOT** exceed the maximum rate per application listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.
- **DO NOT** exceed the maximum rate per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.
- **DO NOT** exceed the maximum number of applications per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.

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 higher rate under heavy grass pressure and/or when annual bluegrass is more mature.

* Use a minimum of 5.5 fl oz (0.129 lb ai)/A to control annual bluegrass in seedling and established alfalfa and mint.

** See **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS**, for maximum application rates and restrictions.

INSTRUCTIONS FOR USE IN GLYPHOSATE RESISTANT FIELD CORN (BURNDOWN) FOR REPLANTING OR CLEANUP		
GRASS SPECIES	WEED STAGE	RATE FL OZ/A (when applied alone or with glyphosate)
Field Corn	Up to 12	1.9 fl oz (0.045 lb ai)

RESTRICTIONS:

- **DO NOT** exceed the maximum rate per application listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.
 - **DO NOT** exceed the maximum rate per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.
 - **DO NOT** exceed the maximum number of applications per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.
- For control of existing stand of glyphosate resistant field corn or volunteer glyphosate resistant field corn prior to replanting field corn. Care must be taken to avoid in field boom (spray) overlaps or excessive crop injury may occur.
- Replant no sooner than 6 days after application.
- Adjuvant rates: Non-ionic Surfactant (NIS) at 0.25% v/v plus AMS at 2.5 to 4 lb/A.

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

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

- Make application only to actively growing grasses and 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 maximum rate per application listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table for canola, dry shelled bean & pea (including soybean), edible podded legume vegetables, flax, mustard seed, succulent bean & pea, sugar beet and sunflower.
- **DO NOT** exceed the maximum rate per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table for canola, dry shelled bean & pea (including soybean), edible podded legume vegetables, flax, mustard seed, succulent bean & pea, sugar beet and sunflower.
- **DO NOT** exceed the maximum number of applications per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table for canola, dry shelled bean & pea (including soybean), edible podded legume vegetables, flax, mustard seed, succulent bean & pea, sugar beet and sunflower.

ANNUAL GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT (INCHES)	RATE FL OZ/A ¹
Barnyardgrass	<i>Echinochloa crus-galli</i>	1 to 4	1.9 (0.045 lb ai)
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	1 to 4	2.6 (0.061 lb ai)
Crabgrass			
Large	<i>Digitaria sanguinalis</i>	1 to 3*	1.9 (0.045 lb ai)
Large	<i>Digitaria sanguinalis</i>	1 to 4*	2.6 (0.061 lb ai)
Smooth	<i>Digitaria ischaemum</i>	1 to 3*	1.9 (0.045 lb ai)
Smooth	<i>Digitaria ischaemum</i>	1 to 4*	2.6 (0.061 lb ai)
Southern	<i>Digitaria ciliaris</i>	1 to 4*	2.6 (0.061 lb ai)
Fall Panicum	<i>Panicum dichotomiflorum</i>	1 to 4	1.9 (0.045 lb ai)
Foxtail			
Giant	<i>Setaria faberi</i>	1 to 4	1.9 (0.045 lb ai)
Green	<i>Setaria viridis</i>	1 to 4	1.9 (0.045 lb ai)
Millet	<i>Setaria italica</i>	1 to 4	2.6 (0.061 lb ai)
Yellow	<i>Setaria glauca</i>	1 to 4	1.9 (0.045 lb ai)

(continued)

ANNUAL GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT (INCHES)	RATE FL OZ/A ¹
Seedling Johnsongrass***	<i>Sorghum halepense</i>	1 to 6	2.6 (0.061 lb ai)
Shattercane	<i>Sorghum bicolor</i>	4 to 10	1.9 (0.045 lb ai)
Texas Panicum	<i>Panicum texanum</i>	1 to 4	2.6 (0.061 lb ai)
Volunteer Cereals			
Barley	<i>Hordeum vulgare</i>	1 to 4	2.6 (0.061 lb ai)
Oats	<i>Avena sativa</i>	1 to 4	2.6 (0.061 lb ai)
Wheat	<i>Triticum aestivum</i>	1 to 4	2.6 (0.061 lb ai)
Volunteer Corn**,***	<i>Zea mays</i>	4 to 12	1.9 (0.045 lb ai)
Wild Proso Millet	<i>Panicum miliaceum</i>	1 to 6	1.9 (0.045 lb ai)
Wild Oats	<i>Avena fatua</i>	1 to 4	2.6 (0.061 lb ai)

* Length of lateral growth.

** Not S.R. Corn.

*** Non-ACC resistant.

¹ Always add a non-ionic surfactant at 0.25% v/v total spray volume unless crop specific restrictions and limitations advise otherwise.

INSTRUCTIONS FOR 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 the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.
- **DO NOT** exceed the maximum rate per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.
- **DO NOT** exceed the maximum number of applications per year listed in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table.

PERENNIAL GRASS SPECIES ¹	WEED HEIGHT (INCHES)	MINIMUM RATE FL OZ/A	MAXIMUM RATE ² FL OZ/A
Bermudagrass (<i>Cynodon dactylon</i>)			
First Application	3 (or up to 6" runners)	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Fescue, Tall (<i>Festuca arundinacea</i>)			
First Application	4 to 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	4 to 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Foxtail Barley (<i>Hordeum jubatum</i>)			
First Application	2 to 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	2 to 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Orchardgrass (<i>Dactylis glomerata</i>)			
First Application	4 to 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	4 to 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Quackgrass (<i>Elytrigia repens</i>)			
First Application	4 to 12	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	4 to 12	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)

(continued)

PERENNIAL GRASS SPECIES ¹	WEED HEIGHT (INCHES)	MINIMUM RATE FL OZ/A	MAXIMUM RATE ² FL OZ/A
Rhizome Johnsongrass* (<i>Sorghum halepense</i>)			
First Application	12 to 24	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	6 to 18	2.9 (0.068 lb ai)	7.8 (0.182 lb ai)
Wirestem Muhly (<i>Muhlenbergia frondosa</i>)			
First Application	4 to 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	4 to 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Perennial Bluegrass Roughstalk (<i>Poa trivialis</i>) Kentucky (<i>Poa pratensis</i>)			
First Application	2 to 4	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	2 to 4	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Bentgrass (<i>Agrostis</i> spp.)			
First Application	2 to 4	-	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	2 to 4	-	10.3 (0.242 lb ai)

* Non-ACC resistant.

¹ Control of perennial grasses including quackgrass, perennial bluegrass and bentgrass with this product may be enhanced by adding AMS.

² Use the higher rate under heavy grass pressure and/or when grasses are at maximum height. Follow the use rate restrictions in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table before applying higher rates.

TANK-MIXES INFORMATION

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

The labels for each of the herbicides specified for tank-mixing with SHADOW 3EC Herbicide are unique to the characteristics of those products and contain restrictions and limitations that may be more restrictive than SHADOW 3EC Herbicide in certain considerations. Those concerns may include, but are not limited to:

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

ALWAYS FOLLOW THE MOST RESTRICTIVE LABELING OF ANY PRODUCT USED IN A TANK-MIX.

TANK-MIX APPLICATION OF SHADOW 3EC HERBICIDE AND BROADLEAF HERBICIDES FOR CONTROL OF GRASSES AND BROADLEAF WEEDS

- Make application only to actively growing grass and broadleaf weeds at listed height or growth stage listed on each label.
- Make application when the first grass or broadleaf weed species in a mixed population reaches the listed 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 rate directions 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 SHADOW 3EC Herbicide as specified in the respective size and rate tables.
- **DO NOT** tank-mix SHADOW 3EC Herbicide 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 SHADOW 3EC Herbicide, 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, non-ionic surfactant and/or nitrogen solution).
4. Fill spray tank to desired level with water.
5. 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 SHADOW 3EC Herbicide with postemergence broadleaf herbicides have shown some reduction or failure to control certain grass species, which would have otherwise been controlled by SHADOW 3EC Herbicide alone. Activity of the postemergence broadleaf herbicide in the tank-mix is not affected.

ALFALFA⁷ SHADOW 3EC HERBICIDE TANK-MIXES WITH BROADLEAF HERBICIDES FOR ALFALFA (See crop specific tables for application directions.)						
TANK-MIX PRODUCT ²	APPLICATION RATES/ACRE ¹		SPRAY ADDITIVE RATES			
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND		AIR	
			ADJUVANT	AMS	ADJUVANT	AMS
SHADOW 3EC Herbicide + 2,4-DB ³	3.9 - 10.3 fl oz (0.091 - 0.242 lb ai) + See tank-mix partner label.	5.2 - 10.3 fl oz (0.121 - 0.242 lb ai) + See tank-mix partner label.	NIS 0.25% v/v	2.5 lb/A	NIS 0.25% v/v	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + bromoxynil ^{5,6}	3.9 - 10.3 fl oz (0.091 - 0.242 lb ai) + See tank-mix partner label.	-	NIS 0.25% v/v	2.5 lb/A	NIS 0.25% v/v	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + imazamox	3.9 - 10.3 fl oz (0.091 - 0.242 lb ai) + See tank-mix partner label.	-	NIS 0.25% v/v	2.5 lb/A	NIS 0.25% v/v	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + imazethapyr ⁴	3.9 - 10.3 fl oz (0.091 - 0.242 lb ai) + See tank-mix partner label.	-	NIS 0.25% v/v	2.5 lb/A	NIS 0.25% v/v	17 lb/100 gal of spray solution

¹ If grass regrowth occurs or an additional flush of new grass emerges, apply a second application of SHADOW 3EC Herbicide alone (without a tank-mix herbicide), according to the appropriate size and rate specifications.

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

³ SHADOW 3EC Herbicide plus 2,4-DB may increase the severity of crop injury when tank-mixed. Alfalfa plants will generally outgrow this temporary crop injury within a few weeks.

⁴ Before using this tank-mix, read and understand the imazethapyr labels for geographical restrictions and restrictions regarding alfalfa growth stage and type. Failure to do so can result in crop injury to alfalfa. **RESTRICTION: DO NOT** feed, graze or harvest alfalfa for 30 days following an application of imazethapyr to alfalfa.

⁵ 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 SHADOW 3EC Herbicide plus bromoxynil must be applied in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 2 trifoliolate. Unacceptable crop injury can occur to alfalfa seedlings less than the 2-trifoliolate leaf stage.

⁶ Bromoxynil plus SHADOW 3EC Herbicide 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 trifoliolate leaves. Unacceptable crop injury may occur to alfalfa in the 2 trifoliolate or smaller stage growth, when alfalfa stand is uneven and conditions favor leaf burn. When applications of SHADOW 3EC Herbicide plus bromoxynil 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 SHADOW 3EC Herbicide plus bromoxynil applications. Warm, humid conditions may enhance leaf burn. However, new crop growth will not be affected.

⁷ **RESTRICTION: DO NOT** make application when alfalfa is under moisture, temperature, insect or disease stress or has been stressed by other pesticide carryover or application.

BUSHBERRY, CANEBERRY, POME FRUIT AND STONE FRUIT

Apply SHADOW 3EC Herbicide postemergence to actively growing grasses according to prescribed rates in the **CROP SPECIFIC USE INSTRUCTIONS AND RESTRICTIONS** table. Crop injury to bushberry, caneberry, pome fruit and stone fruit can occur if SHADOW 3EC Herbicide is improperly applied.

SHADOW 3EC Herbicide must not be applied directly over the top of these plant types. Instead spray must be directed at the base of the plant where grassy weeds are growing near the ground.

RESTRICTION: DO NOT apply SHADOW 3EC Herbicide to bushberry, caneberry, pome fruit or stone fruit grown for root stock.

CANOLA (except flax) Rapeseed Subgroup 20A (except flax seed, mustard seed, and sesame seed) REDUCED RATE SHADOW 3EC HERBICIDE TANK-MIXES WITH BROADLEAF HERBICIDES (See crop specific tables for application directions.)					
TANK-MIX PRODUCT	APPLICATION RATES/ACRE		SPRAY ADDITIVE RATES		
	ANNUAL GRASSES ¹	PERENNIAL GRASSES	ADJUVANT	AMMONIUM SULFATE	
				GROUND	AIR
SHADOW 3EC Herbicide ² + clopyralid ⁴	2.6 - 3.2 fl oz (0.061 - 0.076 lb ai) + See tank-mix partner label.	-	NIS 0.25% v/v	3.0 lb/A	3.0 lb/A
SHADOW 3EC Herbicide ² + glufosinate ³	2.6 - 3.2 fl oz (0.061 - 0.076 lb ai) + See tank-mix partner label.	-	NIS 0.25% v/v	3.0 lb/A	3.0 lb/A

¹ Annual grasses and sizes controlled with these tank-mixtures are those that are identified in the **INSTRUCTIONS FOR SMALL ANNUAL GRASSES** section.

² **RESTRICTION: DO NOT** apply SHADOW 3EC Herbicide tank-mix during or after bolting or flowering or crop injury could occur.

³ For use only on glufosinate resistant canola.

⁴ See clopyralid label for weeds controlled.

COTTON (including cotton grown for seed) SHADOW 3EC HERBICIDE TANK-MIXED WITH LACTOFEN AND MSMA APPLIED POST-DIRECTED				
TANK-MIX PRODUCT ¹	APPLICATION RATES/ACRE ²		CROP OIL CONCENTRATE ³ (V/V)	USE INSTRUCTIONS
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	
SHADOW 3EC Herbicide ⁴ + Cobra (lactofen) + MSMA (4.0 lb/gal) OR MSMA (6.6 lb/gal)	3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)	5.2 - 10.3 fl oz (0.121 - 0.242 lb ai)	1%	Reduce broadcast rate in proportion to the band area actually treated.
	See lactofen label for rates to control broadleaf weeds and height limitations for cotton. See SHADOW 3EC Herbicide label for weed height and species controlled.			
	See MSMA label for rates to control broadleaf weeds and height limitations for cotton. See SHADOW 3EC Herbicide label for weed height and species controlled.			

¹ Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank-mixing is not advised in these situations.

² If grass regrowth occurs or an additional flush of new grass emerges, apply a second application of SHADOW 3EC Herbicide alone (without a tank-mix herbicide) according to the appropriate size and rate specifications.

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 SHADOW 3EC Herbicide may be necessary.

COTTON					
SHADOW 3EC HERBICIDE TANK-MIXED WITH GLYPHOSATE TO CONTROL EMERGED GRASSES IN GLYPHOSATE RESISTANT COTTON AS A BROADCAST APPLICATION					
TANK-MIX PRODUCT	APPLICATION RATES/ACRE¹		ADJUVANT		USE INSTRUCTIONS
	ANNUAL GRASSES	PERENNIAL GRASSES	Glyphosate formulation WITH adjuvant	Glyphosate formulation WITHOUT adjuvant	
SHADOW 3EC Herbicide + glyphosate	2.9 - 5.2 fl oz (0.068 - 0.121 lb ai)	3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	Ammonium sulfate at 8.5 to 17 lb per 100 gallons carrier plus glyphosate label adjuvant specification.	Ammonium sulfate at 8.5 to 17 lb per 100-gal carrier plus non-ionic surfactant at 0.25% v/v.	See charts for grasses controlled. Use a minimum of 10 gal of spray solution per acre.
	See glyphosate label for rates to control broadleaf weeds and height limitations for cotton.				

¹ If grass regrowth occurs or an additional flush of new grass emerges, apply a second application of SHADOW 3EC Herbicide at the specified rate with the appropriate amount of crop oil.

DRY SHELLED AND SUCCULENT BEANS SHADOW 3EC HERBICIDE TANK-MIXES WITH BROADLEAF HERBICIDES (See crop specific tables for application directions.)				
TANK-MIX PRODUCT ²	APPLICATION RATES/ACRE ¹		ADJUVANT	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
SHADOW 3EC Herbicide + bentazon	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	3.9 - 7.8 fl oz (0.091 - 0.182 lb ai) + See tank-mix partner label.	COC at 1% v/v + AMS at 2.5 lb/A	COC at 1% v/v + AMS at 17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + imazamox	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	-	NIS at 0.25% + AMS at 2.5 lb/A	NIS at 0.25% + AMS at 17 lb/100 gal of spray solution

¹ If grass regrowth occurs or an additional flush of new grass emerges, make a second application of SHADOW 3EC Herbicide alone (without a tank-mix herbicide) according to the appropriate size and rate specifications.

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 advised in these situations.

FLAX REDUCED RATE SHADOW 3EC HERBICIDE TANK-MIXES WITH BROADLEAF HERBICIDES (See crop specific tables for application directions.)				
TANK-MIX PRODUCT	APPLICATION RATES/ACRE		ADJUVANT	
	ANNUAL GRASSES ¹	PERENNIAL GRASSES	GROUND	AIR
SHADOW 3EC Herbicide + (MCPA + bromoxynil) ^{2,3} OR bromoxynil ^{2,3}	1.9 - 2.9 fl oz (0.045 - 0.068 lb ai) + See tank-mix partner label.	-	NIS at 0.125% + AMS at 2.4 - 4 lb/A	AMS at 2.5 - 4 lb/A
SHADOW 3EC Herbicide + clopyralid ^{2,3}	1.9 - 2.9 fl oz (0.045 - 0.068 lb ai) + See tank-mix partner label.	-	NIS at 0.125% + AMS at 2.4 - 4 lb/A	AMS at 2.5 - 4 lb/A
SHADOW 3EC Herbicide + MCPA ^{2,3}	2.6 - 3.2 fl oz (0.061 - 0.076 lb ai) + See tank-mix partner label.	-	NIS at 0.125% + AMS at 2.4 - 4 lb/A	AMS at 2.5 - 4 lb/A

¹ Annual grasses and sizes controlled with these tank-mixtures are those that are identified in the **INSTRUCTIONS FOR SMALL ANNUAL GRASSES** section.

² **RESTRICTION: DO NOT** apply SHADOW 3EC Herbicide tank-mix during or after the bud stage or to ornamental flax as crop injury can occur.

³ **RESTRICTION: 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.

PEANUT (including perennial) SHADOW 3EC HERBICIDE TANK-MIXES WITH BROADLEAF HERBICIDES (See crop specific tables for application directions.)				
TANK-MIX PRODUCT ²	APPLICATION RATES/ACRE ¹		ADJUVANT RATES	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
SHADOW 3EC Herbicide + bentazon	2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) + See tank-mix partner label.	-	COC at 1% v/v + AMS at 2.5 lb/A	COC at 1% v/v + AMS at 17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + sodium acifluorfen	2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) + See tank-mix partner label.	-	COC at 1% v/v + AMS at 2.5 lb/A	COC at 1% v/v + AMS at 17 lb/100 gal of spray solution

¹ Make a second application of SHADOW 3EC Herbicide alone (without a tank-mix herbicide) according to the appropriate size and rate specifications, 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 advised in these situations.

PEANUT (including perennial) INSTRUCTIONS FOR GRASS SUPPRESSION FOR HARVEST EFFICIENCY WITH SHADOW 3EC HERBICIDE			
GRASS SPECIES	WEED STAGE	RATE FL OZ/A	
Annual and perennial grasses that exceed height claimed for control on height charts, INSTRUCTIONS FOR ANNUAL GRASSES & INSTRUCTIONS FOR PERENNIAL GRASSES.	Up to and including grasses in the seed head stage.	10.3 (0.242 lb ai)	20.7 (0.485 lb ai)
Add a crop oil concentrate at 1 qt/A by ground to the finished spray volume. RESTRICTION: DO NOT apply as part of a tank-mix when applying SHADOW 3EC Herbicide for grass suppression.			

SOYBEAN BURNDOWN SHADOW 3EC HERBICIDE TANK-MIX WITH 2,4-D ESTER IN A BURNDOWN APPLICATION IN NO-TILL SOYBEAN FOR CONTROL OF ANNUAL GRASSES						
TANK-MIX PRODUCT	WEED SIZE AND APPLICATION RATE/ACRE		ADJUVANT RATES			
	VOLUNTEER CORN HEIGHT (INCHES)	RATES FL OZ/ACRE	GROUND		AIR	
			NIS	AMS	NIS	AMS
SHADOW 3EC Herbicide + cloransulam	Up to 12 Up to 24 Up to 36	1.9 fl oz (0.045 lb ai) 2.9 fl oz (0.068 lb ai) 3.9 fl oz (0.091 lb ai) + See tank-mix partner label.	0.25% v/v	2.5 lb/A	0.25% v/v	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + glyphosate ^{1,2,3,4}	Up to 12 Up to 24 Up to 36	1.9 fl oz (0.045 lb ai) 2.9 fl oz (0.068 lb ai) 3.9 fl oz (0.091 lb ai) + See tank-mix partner label.	Glyphosate formulation WITH adjuvant: None required Glyphosate formulation WITHOUT adjuvant: 0.25% v/v	8.5 - 17 lb/ 100 gals	Glyphosate formulation WITH adjuvant: None required Glyphosate formulation WITHOUT adjuvant: 0.25% v/v	8.5 - 17 lb/ 100 gal of spray solution
SHADOW 3EC Herbicide + imazamox	Up to 12 Up to 24 Up to 36	1.9 fl oz (0.045 lb ai) 2.9 fl oz (0.068 lb ai) 3.9 fl oz (0.091 lb ai) + See tank-mix partner label.	0.25% v/v	2.5 lb/A	0.25% v/v	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + imazethapyr	Up to 12 Up to 24 Up to 36	1.9 fl oz (0.045 lb ai) 2.9 fl oz (0.068 lb ai) 3.9 fl oz (0.091 lb ai) + See tank-mix partner label.	0.25% v/v	2.5 lb/A	0.25% v/v	17 lb/100 gal of spray solution

¹ This tank-mix may be applied postemergence to glyphosate resistant soybeans up through the full flowering stage. **RESTRICTION: DO NOT** apply less than 60 days before harvest.

² Avoid contact with foliage, green stems or fruit crops or any desirable plants and trees, other than soybeans with the glyphosate resistant gene as severe plant injury or death will result.

³ **RESTRICTION: DO NOT** allow this product plus glyphosate to mist, drip, drift or splash onto desirable vegetation as minute quantities of the tank-mix can cause severe damage or destruction to the crops, plants or other areas on which treatment was not intended. The likelihood of injury occurring from drift of this product is greatest when winds are gusty or in excess of 5 miles per hour. Even under lesser wind velocities, avoid conditions that allow spray drift to occur including combinations of spray pressure and nozzle type that will result in fine particles (mist) that are likely to drift.

⁴ Glyphosate resistant soybeans only.

SOYBEAN SHADOW 3EC HERBICIDE TANK-MIXES WITH BROADLEAF HERBICIDES (See crop specific tables for application directions.)					
PRODUCT ¹	APPLICATION RATES/ACRE ²	ADJUVANT RATES			
	ANNUAL GRASSES ³	GROUND		AIR	
		COC/NIS ⁴	AMS	COC/NIS ⁴	AMS
SHADOW 3EC Herbicide + cloransulam ⁵	2.9 - 6.4 fl oz (0.068 - 0.151 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	NIS at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + flumiclorac	2.9 - 6.4 fl oz (0.068 - 0.151 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1 - 2 pts/A	2.5 lb/A	-	-
SHADOW 3EC Herbicide + fomesafen ⁵	2.9 - 6.4 fl oz (0.068 - 0.151 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1 - 2 pts/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + imazamox ⁵	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	NIS at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + imazethapyr ⁵	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	NIS at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + Cobra (lactofen)	2.9 - 6.4 fl oz (0.068 - 0.151 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1 - 2 pts/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + Phoenix™ (lactofen)	2.9 - 6.4 fl oz (0.068 - 0.151 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v + COC at 0.125 - 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution

(continued)

SOYBEAN SHADOW 3EC HERBICIDE TANK-MIXES WITH BROADLEAF HERBICIDES (See crop specific tables for application directions.)					
PRODUCT ¹	APPLICATION RATES/ACRE ²	ADJUVANT RATES			
	ANNUAL GRASSES ³	GROUND		AIR	
		COC/NIS ⁴	AMS	COC/NIS ⁴	AMS
SHADOW 3EC Herbicide + thifensulfuron ⁵	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	NIS at 0.125 - 0.25% v/v	2.5 lb/A	-	-
SHADOW 3EC Herbicide + Synchrony XP (mp) (chlorimuron + thifensulfuron) ⁵	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	NIS at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + Synchrony XP (mp) (chlorimuron + thifensulfuron) ⁵ (STS Soybeans Only)	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	NIS at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + cloransulam ⁵ + fomesafen ⁵	2.9 - 6.4 fl oz (0.068 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.25% v/v OR Equivalent blended product OR COC at 1 - 2 pts/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + flumiclorac + imazethapyr ⁵	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1 - 2 pts/A	2.5 lb/A	-	-
SHADOW 3EC Herbicide + Cobra (lactofen) + Synchrony XP (mp) (chlorimuron + thifensulfuron) ⁵	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1 - 2 pts/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution

(continued)

SOYBEAN SHADOW 3EC HERBICIDE TANK-MIXES WITH BROADLEAF HERBICIDES (See crop specific tables for application directions.)					
PRODUCT ¹	APPLICATION RATES/ACRE ²	ADJUVANT RATES			
	ANNUAL GRASSES ³	GROUND		AIR	
		COC/NIS ⁴	AMS	COC/NIS ⁴	AMS
SHADOW 3EC Herbicide + Cobra (lactofen) + Synchrony XP (mp) (chlorimuron + thifensulfuron) ⁵ (STS Soybeans Only)	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1 - 2 pts/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + Phoenix (lactofen) + Synchrony XP (mp) (chlorimuron + thifensulfuron) ⁵	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.125 - 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + Phoenix (lactofen) + Synchrony XP (mp) (chlorimuron + thifensulfuron) ⁵ (STS Soybeans Only)	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.125 - 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + Cobra (lactofen) + cloransulam ⁵	2.9 - 6.4 fl oz (0.068 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1 - 2 pts/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + Phoenix (lactofen) + cloransulam ⁵	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.125 - 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution

(continued)

SOYBEAN SHADOW 3EC HERBICIDE TANK-MIXES WITH BROADLEAF HERBICIDES (See crop specific tables for application directions.)					
PRODUCT ¹	APPLICATION RATES/ACRE ²	ADJUVANT RATES			
	ANNUAL GRASSES ³	GROUND		AIR	
		COC/NIS ⁴	AMS	COC/NIS ⁴	AMS
SHADOW 3EC Herbicide + Cobra (lactofen) + flumiclorac	2.9 - 6.4 fl oz (0.068 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1 - 2 pts/A	2.5 lb/A	-	-
SHADOW 3EC Herbicide + Phoenix (lactofen) + flumiclorac	2.9 - 6.4 fl oz (0.068 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.125 - 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	-	-
SHADOW 3EC Herbicide + Cobra (lactofen) + imazamox ⁵	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1 - 2 pts/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + Phoenix (lactofen) + imazamox ⁵	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.125 - 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + Cobra (lactofen) + imazethapyr ⁵	3.9 - 6.4 fl oz (0.091 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1 - 2 pts/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution
SHADOW 3EC Herbicide + Phoenix (lactofen) + imazethapyr ⁵	5.2 - 6.4 fl oz (0.121 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.125 - 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1% v/v (but no less than 1 pt/A)	17 lb/100 gal of spray solution

(continued)

SOYBEAN SHADOW 3EC HERBICIDE TANK-MIXES WITH BROADLEAF HERBICIDES (See crop specific tables for application directions.)					
PRODUCT ¹	APPLICATION RATES/ACRE ²	ADJUVANT RATES			
	ANNUAL GRASSES ³	GROUND		AIR	
		COC/NIS ⁴	AMS	COC/NIS ⁴	AMS
SHADOW 3EC Herbicide + Cobra (lactofen) + thifensulfuron ⁵	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner labels.	NIS at 0.125 - 0.25% v/v + COC at 0.125% v/v	2.5 lb/A	-	-
SHADOW 3EC Herbicide + Cobra (lactofen) + cloransulam ⁵ + flumiclorac	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.25% v/v OR COC at 1 - 2 pts/A	2.5 lb/A	-	-
SHADOW 3EC Herbicide + Phoenix (lactofen) + cloransulam ⁵ + flumiclorac	2.9 - 6.4 fl oz (0.068 - 0.151 lb ai) + See tank-mix partner labels.	NIS at 0.25% v/v + COC at 0.125 - 0.25% v/v OR COC at 1 pt/A	2.5 lb/A	-	-

¹ 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 advised in these situations.

² If grass regrowth occurs or an additional flush of new grass emerges, make a second application of SHADOW 3EC Herbicide alone (without a tank-mix herbicide) according to the appropriate size and rate specifications.

³ Annual grasses and sizes controlled with these tank-mixtures are those that are identified in the **INSTRUCTIONS FOR SMALL ANNUAL GRASSES** section.

⁴ Contact local UPL NA Inc. representative for proper COC/NIS adjuvant selection.

⁵ Refer to the cloransulam, fomesafen, imazamox, imazethapyr, thifensulfuron and Synchrony XP (mp) (chlorimuron plus thifensulfuron) labels for geographic and rotational restrictions.

SUGAR BEET SHADOW 3EC HERBICIDE TANK-MIXED WITH CLOPYRALID OR FUNGICIDES (See crop specific tables for application directions.)		
TANK-MIX PRODUCT ¹	APPLICATION RATES/ACRE	ADJUVANT RATES
SHADOW 3EC Herbicide + desmedipham OR Betamix® (desmedipham + phenmedipham) OR Progress® (desmedipham + phenmedipham + ethofumesate) + /OR clopyralid + /OR triflusalufuron methyl	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner labels.	NIS at 0.25% unless desmedipham plus phenmedipham, desmedipham or desmedipham plus phenmedipham plus ethofumesate is in the tank, then use no adjuvant.

¹ Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank-mixing is not advised in these situations.

SUGAR BEET SHADOW 3EC HERBICIDE TANK-MIXED WITH DESMEDIPHAM OR DESMEDIPHAM PLUS PHENMEDIPHAM TANK-MIX FOR THREE SEQUENTIAL APPLICATIONS FOR ANNUAL GRASS CONTROL (MICRO-RATE APPLICATION) (See crop specific tables for application directions.)					
PRODUCTS	APPLICATION RATES/ACRE ¹				
	ANNUAL GRASSES	GRASSES CONTROLLED (INCHES)		METHYLATED SEED OIL ²	
				GROUND	AIR
SHADOW 3EC Herbicide + desmedipham OR Betamix (desmedipham + phenmedipham) OR Progress (desmedipham + phenmedipham + ethofumesate) OR clopyralid OR triflusalufuron methyl	1 - 1.9 fl oz (0.023 - 0.045 lb ai) + See tank-mix partner labels.	Green Foxtail Yellow Foxtail Barnyardgrass Wild Oat Volunteer Cereals	(1 - 2) (1 - 2) (1 - 2) (1 - 2) (1 - 2)	1.5% v/v	1.5% v/v

¹ Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank-mixing is not advised in these situations.

² Always use a methylated seed oil at the listed rate, but not less than 1 pt/A, in the finished spray volume.

INSTRUCTIONS FOR USE WITH MICRO-RATE APPLICATIONS TO SUGAR BEETS

Multiple micro-rate applications of SHADOW 3EC Herbicide in tank-mixtures with reduced rates of desmedipham or desmedipham + phenmedipham and methylated seed oils can be applied by air or ground equipment to sugar beets to control early germinating annual grasses listed above. Refer to tank-mix partner label for use rates and restrictions. 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 desmedipham or desmedipham + phenmedipham master labels must be followed.

INSTRUCTIONS FOR USING MICRO-RATE MULTIPLE APPLICATIONS OF SHADOW 3EC HERBICIDE TANK-MIXES

Apply SHADOW 3EC Herbicide in broadcast applications only at a rate of 1 - 1.9 fl oz (0.023 - 0.045 lb ai)/A in tank-mixture with either desmedipham or desmedipham + phenmedipham following the directions for use on the tank-mix partner label. Use a minimum of three sequential applications of 1 fl oz (0.023 lb ai)/A or a minimum of 2 sequential applications of 1.9 fl oz (0.045 lb ai)/A for SHADOW 3EC Herbicide tank-mixtures. Refer to desmedipham or desmedipham + phenmedipham labels for application restrictions. 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 SHADOW 3EC Herbicide, 3.9 - 5.2 fl oz (0.091 - 0.121 lb ai)/A, and add rates of desmedipham or desmedipham + phenmedipham 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 advised when using conventional rates of desmedipham or desmedipham + phenmedipham in tank-mixtures with SHADOW 3EC Herbicide.

Use Precautions for Micro-Rate Applications: (See SHADOW 3EC Herbicide, desmedipham and desmedipham + phenmedipham master labels 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 SHADOW 3EC Herbicide, desmedipham or desmedipham + phenmedipham 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.

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. Ensure spray pressures reflects 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.

TANK-MIX APPLICATION OF SHADOW 3EC HERBICIDE AND FUNGICIDES FOR CONTROL OF GRASS WEEDS AND DISEASES IN SUGAR BEET

PRODUCT ²	APPLICATION RATES/ACRE ¹		ADJUVANT RATES
	ANNUAL GRASSES	PERENNIAL GRASSES	
SHADOW 3EC Herbicide + tetraconazole	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	3.9 - 7.8 fl oz (0.091 - 0.182 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v
SHADOW 3EC Herbicide + pyraclostrobin	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	3.9 - 7.8 fl oz (0.091 - 0.182 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v
SHADOW 3EC Herbicide + trifloxystrobin	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	3.9 - 7.8 fl oz (0.091 - 0.182 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v

¹ Make a second application of SHADOW 3EC Herbicide alone (without a tank-mix fungicide) 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 SHADOW 3EC Herbicide and fungicide label for rates and weeds and diseases controlled.

**TANK-MIX APPLICATION OF SHADOW 3EC HERBICIDE AND INSECTICIDES
FOR CONTROL OF GRASS WEEDS AND INSECTS IN ALFALFA, COTTON, MINT (PEPPERMINT,
TOPS AND SPEARMINT, TOPS), PEANUT (INCLUDING PERENNIAL), SOYBEAN AND SUNFLOWER**

PRODUCT ²	APPLICATION RATES/ACRE ¹		ADJUVANT RATES	CROP					
	ANNUAL GRASSES	PERENNIAL GRASSES		Alfalfa ³	Cotton	Mint ^{3,4}	Peanut	Soybean	Sunflower
SHADOW 3EC Herbicide + acephate	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	3.9 - 7.8 fl oz (0.091 - 0.182 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v + AMS at 2.5 lb/A		X	X	X	X	
SHADOW 3EC Herbicide + B-cyfluthrin	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	3.9 - 7.8 fl oz (0.091 - 0.182 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v + AMS at 2.5 lb/A	X				X	
SHADOW 3EC Herbicide + dimethoate	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	3.9 - 7.8 fl oz (0.091 - 0.182 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v + AMS at 2.5 lb/A	X				X	
SHADOW 3EC Herbicide + esfenvalerate	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	3.9 - 7.8 fl oz (0.091 - 0.182 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v + AMS at 2.5 lb/A					X	X
SHADOW 3EC Herbicide + fenpropathrin	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	3.9 - 7.8 fl oz (0.091 - 0.182 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v + AMS at 2.5 lb/A		X		X		
SHADOW 3EC Herbicide + lambda-cyhalothrin	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	3.9 - 7.8 fl oz (0.091 - 0.182 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v + AMS at 2.5 lb/A					X	X
SHADOW 3EC Herbicide + permethrin	2.9 - 3.9 fl oz (0.068 - 0.091 lb ai) + See tank-mix partner label.	3.9 - 7.8 fl oz (0.091 - 0.182 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v + AMS at 2.5 lb/A	X				X	

¹ Make a second application of SHADOW 3EC Herbicide alone (without a tank-mix insecticide) according to the appropriate size and rate specifications, if grass regrowth occurs or an additional flush of new grass emerges.

² Refer to SHADOW 3EC Herbicide and insecticide label for rates and weeds and insects controlled.

³ 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.

⁴ The rate for SHADOW 3EC Herbicide for annual grass control in baby mint is 2.9 - 3.9 fl oz (0.068 - 0.091 lb ai)/A; minimum of 3.9 fl oz (0.091 lb ai)/A for annual grass control in established mint and 5.2 - 10.3 fl oz (0.121 - 0.242 lb ai)/A for perennial grass control.

CONIFER TREES SPECIFIC INSTRUCTIONS AND RESTRICTIONS

COMMON NAME	SCIENTIFIC NAME	USE RATES PER ACRE
Arborvitae, American Cedars Cypress Fir, Douglas Firs Hemlock, Canadian/Eastern Hemlock, Western Pines Spruces Yew	<i>Thuja occidentalis</i> <i>Cedrus</i> spp. <i>Taxodium</i> spp. <i>Pseudotsuga menziesii</i> <i>Abies</i> spp. <i>Tsuga canadensis</i> <i>Tsuga heterophylla</i> <i>Pinus</i> spp. <i>Picea</i> spp. <i>Taxus</i> spp.	Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)

USE INSTRUCTIONS:

For control of labeled grasses in Christmas tree farms, conifer nurseries, and conifer plantations, but not in forests.

Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gals (0.25% v/v) plus 2.5 - 4 lb/A ammonium sulfate or 1 qt/A or 1% v/v of crop oil concentrate or methylated seed oil plus 2.5 - 4 lb/A ammonium sulfate.

RESTRICTIONS:

- **DO NOT** apply more than 10.3 fl oz (0.242 lb ai) per acre per application.
- For perennial grasses, **DO NOT** apply more than 2 applications per year.
- For annual grasses, **DO NOT** apply more than 4 applications per acre per year.
- **DO NOT** apply more than 20.7 fl oz (0.485 lb ai) per acre per year.
- **DO NOT** make repeat applications less than 14-days apart.

NON-CROP OR NON-PLANTED AREAS GRASS SUPPRESSION SPECIFIC INSTRUCTIONS AND RESTRICTIONS

GRASS SPECIES	WEED STAGE	USE RATES	
		Annual Grasses:	Perennial Grasses:
Annual and perennial grasses that exceed height claimed for control on height chart below.	Up to and including grasses in the seed head stage.	2.9 - 5.2 fl oz (0.068 - 0.121 lb ai)	3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)

USE INSTRUCTIONS:

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

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

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

RESTRICTIONS:

- **DO NOT** apply more than 10.3 fl oz (0.242 lb ai) per acre per application.
- For perennial grasses, **DO NOT** apply more than 2 applications per year.
- For annual grasses, **DO NOT** apply more than 4 applications per acre per year.
- **DO NOT** apply more than 20.7 fl oz (0.485 lb ai) per acre per year.
- **DO NOT** make repeat applications less than 14-days apart.
- Aerial applications for all tree fruits and tree nuts uses are prohibited.
- Other than the crop oil identified, **DO NOT** apply as part of a tank-mix when applying this product for grass suppression.

NON-BEARING FRUIT AND NUT CROPS SPECIFIC INSTRUCTIONS AND RESTRICTIONS

CROPS		USE RATES PER ACRE
COMMON NAME	SCIENTIFIC NAME	
Apples	<i>Malus</i> spp.	2.9 - 5.2 fl oz (0.068 - 0.121 lb ai)
Berries	<i>Vaccinium</i> spp.	
Cherry, Sweet	<i>Rubus</i> spp.	
Citrus Fruits	<i>Prunus avium</i>	
Grapes	<i>Citrus</i> spp.	
Olives	<i>Vitis</i> spp.	
Peach	<i>Olea</i> spp.	
Pears	<i>Prunus persica</i>	
Prunes	<i>Pyrus communis</i>	
Stone Fruits	<i>Prunus</i> spp.	
Strawberries	<i>Prunus</i> spp.	
Tree Nuts:	<i>Fragaria</i> spp.	
Almond	<i>Prunus triloba</i>	
Filbert	<i>Corylus maxima</i>	
Pecan	<i>Carya illinoensis</i>	
Pistachio	<i>Pistacia vera</i>	
Walnut	<i>Juglans</i> spp.	

USE INSTRUCTIONS:

Non-bearing fruit and nut crops are plants, which will not bear fruit or nuts for at least one year following an application of SHADOW 3EC Herbicide.

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

Crop injury to non-bearing fruit and nut crops may occur if SHADOW 3EC Herbicide is improperly applied. SHADOW 3EC Herbicide must not be applied directly over the top of these plant types. Instead, direct spray at the base of the plant where grassy weeds are growing near the ground.

RESTRICTIONS:

- **DO NOT** apply more than 5.2 fl oz (0.121 lb ai) per acre per application.
- **DO NOT** apply more than 4 applications per year.
- **DO NOT** apply more than 20.7 fl oz (0.485 lb ai) per acre per year.
- **DO NOT** make repeat applications less than 14-days apart.
- Sugar maples cannot be tapped for syrup within one year of SHADOW 3EC Herbicide application.
- **DO NOT APPLY SHADOW 3EC HERBICIDE TO NON-BEARING FRUIT OR NUT CROPS GROWN FOR ROOT STOCK.**
- If SHADOW 3EC Herbicide is applied as a spot treatment to non-bearing fruit and nut crops, **DO NOT** exceed the maximum rate allowed on a "per acre" basis.
- **DO NOT** use a crop oil concentrate as injury to flower and foliage may occur.
- Aerial applications for all tree fruits and tree nuts uses are prohibited.

FALLOW LAND

(and other non-producing agricultural areas)

SHADOW 3EC Herbicide 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 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai)/A for annual grasses and 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)/A for perennial grasses. SHADOW 3EC Herbicide can be tanked-mixed with 2,4-D ester or dicamba for broad-spectrum control when both grass and broadleaf weeds are the target pest. Apply a minimum of 5.2 fl oz (0.121 lb ai)/A SHADOW 3EC Herbicide when both annual and perennial grasses occur in the same field.

- Add a crop oil concentrate/methylated seed oil at 1 qt/A or 1% v/v with 2.5 - 4 lb/A of ammonium sulfate to the finished spray volume. Alternatively, add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gals (0.25% v/v) with 2.5 - 4 lb/A ammonium sulfate.
- 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 specified weed height as specified by the **INSTRUCTIONS FOR ANNUAL & PERENNIAL GRASS** section of this label.
- Annual grasses that emerge after the SHADOW 3EC Herbicide application will not be controlled, and a second application may be necessary.
- The control of perennial grasses may require more than 1 application in non-tilled areas.
- 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 10.3 fl oz (0.242 lb ai) per acre per application.
- For annual grasses, **DO NOT** apply more than 4 applications per year.
- For perennial grasses, **DO NOT** apply more than 2 applications per year.
- **DO NOT** apply more than 20.7 fl oz (0.485 lb ai) per acre 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.
- **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** flood jet nozzles.
- **DO NOT** mow area for two (2) weeks prior to or after the SHADOW 3EC Herbicide application.

SHADOW 3EC HERBICIDE IN TANK-MIXES TO CONTROL ANNUAL AND PERENNIAL GRASSES IN FALLOW LAND				
TANK-MIX PRODUCT	SHADOW 3EC HERBICIDE APPLICATION RATES/A ¹		ADJUVANT RATES	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
SHADOW 3EC Herbicide + 2,4-D ester OR dicamba	3.9 - 5.2 fl oz (0.091 - 0.121 lb ai) + See tank-mix partner label.	5.2 - 10.3 fl oz (0.121 - 0.242 lb ai) + See tank-mix partner label.	NIS at 0.25% v/v OR COC at 1% v/v + AMS at 2.5 lb/A	NIS at 0.25% v/v OR COC at 1% v/v + AMS at 17 lb/100 gal of spray solution

¹ See SHADOW 3EC Herbicide label for weed height and species control. Review dicamba and 2,4-D labels for use rates, weeds controlled and crop restrictions.

SHADOW 3EC HERBICIDE FOR THE CONTROL AND/OR SUPPRESSION OF TALL FESCUE IN NATIVE PRAIRIE WARM-SEASON GRASS RESTORATION PROJECTS				
PRODUCT	PRODUCT RATES	GRASS WEEDS CONTROLLED/SUPPRESSED		WEED STAGES
		Common Name	Scientific Name	
SHADOW 3EC Herbicide	3.9 - 5.2 fl oz/A (0.091 - 0.121 lb ai)	Tall Fescue	<i>Festuca arundinacea</i>	4 to 6 inches tall (40 - 60% green-up)
ADJUVANT: SHADOW 3EC Herbicide must be applied with a non-ionic surfactant at 0.25%, plus a spray grade ammonium sulfate (AMS) at 2.5 - 4 lb/A. Specified Mixing Order: Thoroughly mix spray grade ammonium sulfate in water, add SHADOW 3EC Herbicide, then add crop oil concentrate.				

USE 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 to 60% tall fescue green-up, prior to emergence of warm-season grasses.

Make application in a minimum of 15 to 20 gallons water per acre at a spray pressure of 40 to 60 PSI at the nozzle. Apply using flat fan or hollow cone nozzles.

Make application only to fields that have warm-season grasses established for two (2) years. Application of SHADOW 3EC Herbicide to emerged warm-season grasses may cause injury.

NOTE: SHADOW 3EC Herbicide applications are most effective if applied when average nighttime temperatures are consistently greater than or equal to 47°F.

RESTRICTIONS

- **DO NOT** mow area for two (2) weeks after the SHADOW 3EC Herbicide application.
- **DO NOT** use flood jet nozzles.
- **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.

SHADOW 3EC HERBICIDE FOR THE SUPPRESSION OF TALL FESCUE SEED-HEADS IN NON-PRODUCING AGRICULTURAL AREAS				
PRODUCT	APPLICATION RATE	GRASS WEEDS CONTROLLED/SUPPRESSED		APPLICATION TIMING
		Common Name	Scientific Name	
SHADOW 3EC Herbicide	1 - 1.3 fl oz/A (0.023 - 0.03 lb ai)	Tall Fescue Seed-Heads	<i>Festuca arundinacea</i>	50 to 90% tall fescue green-up or 3 weeks prior to dormancy in the fall.
ADJUVANT: SHADOW 3EC Herbicide must be applied with crop oil concentrate at 1 qt/A and a spray grade ammonium sulfate (AMS) at 2.5 - 4 lb/A. Use crop oil concentrate at 2 pt/A with fall applications. Specified Mixing Order: Thoroughly mix spray grade ammonium sulfate in water, then add SHADOW 3EC Herbicide.				
USE INSTRUCTIONS: Make application at 50 to 90% tall fescue green-up. If less tall fescue green matter is present, use the higher SHADOW 3EC Herbicide rate. Make application in a minimum of 15 to 20 gallons water per acre at a spray pressure of 40 to 60 PSI at the nozzle. Make application using flat fan or hollow cone nozzles. 2,4-D ester, Tordon® 22K (picloram-potassium), Grazon® P+D (2,4-D, triisopropanolamine salt and picloram, triisopropanolamine salt) or Crossbow® (2,4-D, butoxyethyl ester + triclopyr, butoxyethyl ester) may be added to this tank-mix for broadleaf control (see 2,4-D ester label for weeds controlled).				
RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT mow area for two (2) weeks after the SHADOW 3EC Herbicide application. • DO NOT use flood nozzles. • 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	
USE RATE	USE INSTRUCTIONS:
Annual Grasses: 2.9 - 5.2 fl oz (0.068 - 0.121 lb ai) Perennial Grasses: 3.9 - 10.3 fl oz (0.091 - 0.242 lb ai)	SHADOW 3EC Herbicide may 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. Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt per 50 gals (0.25% v/v).
RESTRICTIONS: <ul style="list-style-type: none"> • DO NOT apply more than 10.3 fl oz (0.242 lb ai) per acre per application. • For annual grasses, DO NOT apply more than 4 applications per year. • For perennial grasses, DO NOT apply more than 2 applications per year. • DO NOT apply more than 20.7 fl oz (0.485 lb ai) per acre per year. • DO NOT make repeat applications less than 14-days apart. • DO NOT use a crop oil concentrate as injury to flower and foliage may occur. 	

IMPORTANT: SHADOW 3EC Herbicide successfully controls weeds in newly transplanted and established non-grassy ornamentals. Plant resistance to SHADOW 3EC Herbicide at labeled rates has been found to be acceptable for the indicated genera and species listed below. It is advised 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 SHADOW 3EC Herbicide have investigated the safety factor to ornamental plants not listed on this label.

The following plants have shown a resistance for SHADOW 3EC Herbicide applications.

ORNAMENTAL TREES

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

GROUND COVERS

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

GARDEN FLOWERS AND PLANTS

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

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

SHRUBS

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

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

INSTRUCTIONS 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.

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* (INCHES)	RATE FL OZ/ACRE ¹	HIGH RATE ²
Barnyardgrass	<i>Echinochloa crus-galli</i>	2 - 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Brome				
California	<i>Bromus carinatus</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Cheat	<i>Bromus secalinus</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Downy	<i>Bromus tectorum</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Ripgut	<i>Bromus diandrus</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Canarygrass	<i>Phalaris canariensis</i>	1 - 4	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Crabgrass				
Hairy	<i>Digitaria adscendens</i>	2 - 6**	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Large	<i>Digitaria sanguinalis</i>	2 - 6**	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Smooth	<i>Digitaria ischaemum</i>	2 - 6**	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Southern	<i>Digitaria ciliaris</i>	2 - 6**	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	2 - 6**	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Fall Panicum	<i>Panicum dichotomiflorum</i>	2 - 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Field Sandbur	<i>Cenchrus incertus</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Foxtail				
Giant	<i>Setaria faberi</i>	2 - 12	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Green	<i>Setaria viridis</i>	2 - 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Yellow	<i>Setaria glauca</i>	2 - 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Goosegrass	<i>Eleusine indica</i>	2 - 6**	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Itchgrass	<i>Rottboellia cochlin</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Junglerice	<i>Echinochloa colona</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Lovegrass (Stinkgrass)	<i>Eragrostis cilianensis</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Rabbitsfootgrass	<i>Polypogon monspeliensis</i>	1 - 4	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Red Rice	<i>Oryza sativa</i>	1 - 3	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Ryegrass				
Hardy	<i>Lolium remotum</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Italian***	<i>Lolium multiflorum</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Seedling Johnsongrass***	<i>Sorghum halepense</i>	4 - 10	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Shattercane	<i>Sorghum bicolor</i>	6 - 18	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Southwestern Cupgrass	<i>Eriochloa gracilis</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Sprangletop				
Amazon	<i>Leptochloa panicoides</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Bearded	<i>Leptochloa fascicularis</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Mexican	<i>Leptochloa uninervia</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Red	<i>Leptochloa filiformis</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Texas Panicum	<i>Panicum texanum</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)

(continued)

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* (INCHES)	RATE FL OZ/ACRE ¹	HIGH RATE ²
Volunteer Cereals				
Barley	<i>Hordeum vulgare</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Oats	<i>Avena sativa</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Rye	<i>Secale cereale</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Wheat	<i>Triticum aestivum</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Volunteer Corn	<i>Zea mays</i>	4 - 12	3.9 (0.091 lb ai)	5.2 (0.121 lb ai)
Volunteer Corn	<i>Zea mays</i>	12 - 24	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Volunteer Grain Sorghum	<i>Sorghum bicolor</i>	8 - 12	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Wild Oats	<i>Avena fatua</i>	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Wild Proso Millet	<i>Panicum miliaceum</i>	2 - 10	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Witchgrass	<i>Panicum capillare</i>	2 - 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Woolly Cupgrass	<i>Eriochloa villosa</i>	2 - 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)

* Generally occurs between 3-leaf stage and tillering.

** Length of lateral growth.

*** Non-ACC resistant.

¹ 5.2 fl oz (0.121 lb ai)/A = approximately 0.09 fl oz (0.002 lb ai)/1,000 sq ft

² 10.3 fl oz (0.242 lb ai)/A = approximately 0.26 fl oz (0.006 lb ai)/1,000 sq ft

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

INSTRUCTIONS 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.

GRASS SPECIES	WEED HEIGHT (INCHES)	RATE FL OZ/ACRE ¹	HIGH RATE ²
Bermudagrass (<i>Cynodon dactylon</i>)			
First Application	3 (or up to 6" runners)	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Foxtail Barley (<i>Hordeum jubatum</i>)			
First Application	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	2 - 6	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Quackgrass (<i>Elytrigia repens</i>)			
First Application	4 - 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	4 - 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Rhizome Johnsongrass* (<i>Sorghum halepense</i>)			
First Application	12 - 24	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	6 - 18	3.9 (0.068 lb ai)	5.2 (0.121 lb ai)
Wirestem Muhly (<i>Muhlenbergia frondosa</i>)			
First Application	4 - 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)
Repeat Application(s) (if regrowth occurs)	4 - 8	3.9 (0.091 lb ai)	10.3 (0.242 lb ai)

* Non-ACC resistant.

¹ 3.9 fl oz (0.091 lb ai)/A = approximately 0.09 fl oz (0.002 lb ai)/1,000 sq ft

² 10.3 fl oz (0.242 lb ai)/A = approximately 0.26 fl oz (0.006 lb ai)/1,000 sq ft

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

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to **PRECAUTIONARY STATEMENTS** on label for hazards associated with the handling of this material.

DO NOT walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

Plastic or Metal Rigid, Non-refillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons). Non-refillable container. DO NOT reuse or refill this container. Triple rinse or pressure 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 1/4 full with water and re-cap. Shake for 10 seconds. Pour rinsate into application equipment or a mix-tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix-tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix-tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

Plastic or Metal Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs).

Bottom Discharge IBC (e.g. Schuetz Caged IBC or Snyder Square Stackable). Non-refillable container. DO NOT reuse or refill this container. After emptying product from container, either return container to UPL NA Inc. per instructions from UPL NA Inc. service center (1-800-438-6071), or rinse and either recycle or dispose of the container as follows:

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix-tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal.

Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g. Snyder 120 Next Gen, Bonar B120, Drums, and Kegs). Non-refillable container. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or rinsate collection system. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

**IMPORTANT INFORMATION
READ BEFORE USING PRODUCT**

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of UPL NA Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of UPL NA Inc. and Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold UPL NA Inc. and Seller harmless for any claims relating to such factors.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, UPL NA INC. AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

To the extent consistent with applicable law, UPL NA Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UPL NA INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UPL NA INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

UPL NA Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of UPL NA Inc.

UPL, the UPL logo and SHADOW are trademarks of a UPL Corporation Limited Group Company.

®/™ All other products are trademarks of their respective companies.

©2023 UPL Corporation Limited Group Company

ESL061523-10829-112123