



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

89168-149

Date of Issuance:

8/2/2022

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Liberty Oxyfluorfen 4L

LIBERTY CROP PROTECTION, LLC.
1880 FALL RIVER DRIVE, SUITE 100
LOVELAND, CO 80538

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Heather E McFarley

Product Manager 24

Fungicide and Herbicide Branch, Registration Division (7505P)

Date:

8/2/2022

2. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 89168-149.”
3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

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

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated: 4-25-2022
- Alternate CSF#1 dated: 4-25-2022
- Alternate CSF #2 dated: 4-25-2022
- Alternate CSF#3 dated: 4-25-2022
- Alternate CSF#4 dated: 4-25-2022

If you have any questions, please contact Sayed Islam by phone at 202-566-2796, or via email at islam.sayed@epa.gov

Enclosure:

- Stamped label

{Note to reviewer: [Text] in brackets denotes optional or explanatory language}
{Note to reviewer: {Text} in braces denotes where in the final label text will appear}
{BOOKLET FRONT PANEL LANGUAGE}

OXYFLUORFEN	GROUP	14	HERBICIDE
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LIBERTY OXYFLUORFEN 4L

HERBICIDE

[For Weed Control In: Artichokes (Globe), Broccoli/Cabbage/Cauliflower, Cacao, Citrus (Nonbearing), Coffee, Conifer (Seedbeds, Transplants, Container Stock) And Selected Deciduous Trees, Corn, Cotton, Cottonwood, Eucalyptus, Fallow Bed, (Cotton/Soybeans) Fallow Land, Garbanzo Beans, Garlic, Guava, Horseradish, Jojoba, Mint (Spearmint and Peppermint Tops), Onions, Onions Grown for Seed, Papaya, Soybeans, Taro, Tree Fruit/Nut/Vine]
[For Preemergence and Postemergence Weed Control in Labeled Crops]

ACTIVE INGREDIENT:	% BY WT.
Oxyfluorfen: 2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4-(trifluoromethyl)benzene	41%
OTHER INGREDIENTS:	59%
TOTAL:	100%

Contains 4 pounds active ingredient per gallon.

[SHAKE WELL BEFORE USING]
[RECIRCULATE CONTENTS BEFORE USE]

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.)

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300.

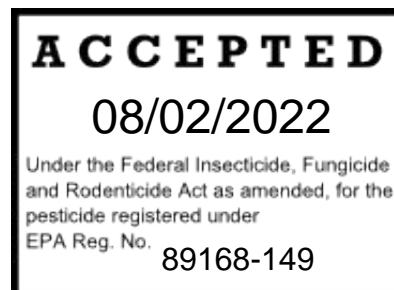
[SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS.]
[See inside booklet for additional Precautionary Statements and Directions for Use.]

EPA Reg. No.: 89168-RUO

EPA Est. No.: _____

Net Contents: ____ Gal (____ L)

Manufactured For:
LIBERTY CROP PROTECTION, LLC
1880 Fall River Drive, Suite 100
Loveland, CO 80538



072822

{LANGUAGE INSIDE BOOKLET}

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

Avoid contact with skin or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders and applicators using engineering controls (see Engineering Controls requirements below) must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves when mixing and loading
- Chemical-resistant apron when mixing and loading

All other mixers, loaders, applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Protective eyewear (goggles or face shield)
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when exposed to the product concentrate

User Safety Requirement

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

Engineering Controls

Mixers and loaders supporting aerial applications to fallow land or ground applications to corn, cotton, or soybeans must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], and must:

- Wear the personal protective equipment required above for mixers/loaders using engineering controls
- Wear protective eyewear if the system operates under pressure, and
- Be provided and have immediately available for use in case of emergency, including a broken package, spill, or equipment breakdown, coveralls and chemical-resistant footwear.

Handlers performing applications to corn must use an enclosed cab that meets the definition in the Worker Protection Standard for agricultural pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, such applicators must:

- Wear the personal protective equipment required above for applicators using engineering controls
- Be provided and must have immediately available for use in an emergency when they must exit the cab in the treated area: coveralls, chemical-resistant gloves, chemical-resistant footwear, and chemical-resistant headgear, if overhead exposure.
- Take off any PPE that was worn in the treated area before reentering the cab, and
- Store all such PPE in a chemical-resistant container, including a plastic bag, to prevent contamination of the inside of the cab.

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)];

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

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates and wildlife. **DO NOT** apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. See Directions for Use for additional restrictions. **DO NOT** contaminate water when disposing of equipment wash water or rinsate.

Surface Water Advisories

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential loading of oxyfluorfen from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

Non-Target Organism Advisory

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

PHYSICAL AND CHEMICAL HAZARDS

DO NOT mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

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

Read all Directions for Use carefully before applying. **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, except for the following:

- **Onions, garlic and horseradish: The REI is 48 hours**

For early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant footwear plus socks

- Chemical-resistant gloves
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron

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.

DO NOT enter or allow others to enter until sprays have dried.

PRODUCT INFORMATION

LIBERTY OXYFLUORFEN 4L is a selective herbicide for postemergence and preemergence residual weed control in labeled crops. Directions provided in the Use Information section of this label apply to all uses of this product. Use directions for listed crops are provided in the Crop-Specific Use Directions section of this label.

Use Restrictions

The following use restrictions apply to all labeled uses of LIBERTY OXYFLUORFEN 4L (Refer to directions for use for individual crops for additional crop-specific use restrictions.):

- **DO NOT** graze or harvest plants from areas treated with this product for feed or forage.
- Apply LIBERTY OXYFLUORFEN 4L only with ground equipment unless otherwise specified in crop-specific use directions.
- This product is phytotoxic to plant foliage. Avoid accidental spray contact or drift with established crops.
- **DO NOT** apply when weather conditions favor drift to non-target areas.
- Some labeled crops are tolerant to over-the-top applications of this product if applied during dormancy.
- **DO NOT** make over-the-top applications unless specifically allowed in crop-specific use directions.
- **DO NOT** treat ditch banks or waterways with this product or contaminate water used for irrigation or domestic purposes.
- **DO NOT** apply this product in enclosed greenhouses as foliage injury will result.

WEED RESISTANCE-MANAGEMENT

For resistance management, this product is a Group 14 herbicide. Any weed population may contain plants naturally resistant to this product and other Group 14 herbicides. The resistant individual may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies must be followed.

Weed Management

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

- Rotate the use of this product or other Group 14 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in the field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species

normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method 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, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact LIBERTY CROP PROTECTION, LLC at 844-425-8488.

Management of Resistant Biotypes

Since the occurrence of resistant weeds cannot be determined until after product use and scientific confirmation, to the extent consistent with applicable law, manufacturer is not responsible for any losses that may result from the failure of this product to control resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product must be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these Mode of Actions have been found in your region. **DO NOT** assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

Integrated Pest (Weed) Management

This product may be integrated into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) must be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

MANDATORY SPRAY DRIFT

Aerial Applications

- **DO NOT** release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators must select nozzle and pressure that deliver a coarse or coarser spray droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.
- When wind speeds are 5 to 10 mph maintain a minimum downwind buffer zone of at least 1/2 mile from all crops and desirable vegetation, except the following:

- 150 feet from dormant tree fruit/nut/vine crops and overwintering sugar beets.
 - 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seedling sugar beets, and non-target vegetable fallow beds.
 - For upwind and side borders, maintain buffer zone of 150 feet from any non-targeted vegetable fallow bed, crop, or desirable vegetation.
- Ground Boom Applications**
- Apply with the nozzle height specified by the manufacturer, but no more than 3 feet above the ground or crop canopy.
 - For all applications, applicators are required to use a coarse or coarser spray 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.
- Boom-less Ground Applications**
- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1) for all applications.
 - **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 specified 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 directions for setting up nozzles. To reduce fine droplets, nozzles must be oriented parallel with the airflow in flight.

Boom-less Ground Applications

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications

- Take precautions to minimize spray drift.

BOOM HEIGHT - Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom must remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift. When applying aurally to crops, **DO NOT** release spray at a height greater than 10 feet above the crop canopy, unless a greater application height is necessary for pilot safety.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

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

WIND

Drift potential 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 Buffer Restrictions

- A 25-foot vegetative buffer strip must be maintained between all areas treated with this product and lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.
- **DO NOT** allow spray to drift from the application site and contact people, structures people may occupy at any time and the associated property, parks and recreation areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.
- Use coarse spray according to ASAE 572 definition for standard nozzles or VMD of 475 microns for spinning atomizer nozzles.

Rotational Crop Restrictions

- **DO NOT** rotate to small-grain crops (includes barley, buckwheat, corn, pearl millet, proso millet, oats, popcorn, rice, rye, sorghum, triticale, wheat, wild rice) within 10 months following an application of LIBERTY OXYFLUORFEN 4L.
- **DO NOT** direct seed any crop, other than a crop labeled for use with LIBERTY OXYFLUORFEN 4L, within 60 days following application.
- **DO NOT** transplant seedlings of crops, other than crops labeled for use with LIBERTY OXYFLUORFEN 4L, within 30 days following application.

IMPORTANT: Unless otherwise specified elsewhere in this label or LIBERTY CROP PROTECTION, LLC supplemental label, treated soil must be thoroughly mixed to a depth of 4 inches after harvest (or abandoning) of the treated crop but prior to planting of the rotational crop. Failure to achieve thorough and complete mixing or to follow the required minimum plant-back interval may result in crop injury, stand reduction and/or vigor reduction of the plant-back crop. See specific fallow bed labeling instructions for required treatment-to-planting intervals following application of LIBERTY OXYFLUORFEN 4L to fallow beds or fallow fields.

Weeds Controlled

Common Name	Scientific Name
Ageratum	<i>Ageratum conyzoides</i>
Amaranth, spiny	<i>Amaranthus spinosus</i>
Balsamapple	<i>Momordica charantia</i>
Barnyardgrass (watergrass) ¹	<i>Echinochloa crus-galli</i>
Bedstraw, catchweed	<i>Galium aparine</i>
Bittercress, lesser	<i>Cardamine oligosperma</i>
Bluegrass, annual ¹	<i>Poa annua</i>
Buckwheat, wild	<i>Polygonum convolvulus</i>
Burclover	<i>Medicago hispida</i>
Buttercup, smallflower	<i>Ranunculus abortivus</i>
Buttonweed	<i>Borreria laevis</i>
Camphorweed	<i>Heterotheca subaxillaris</i>

Canarygrass (annual)	<i>Phalaris canariensis</i>
Carpetweed	<i>Mollugo verticillata</i>
Cheeseweed (malva)	<i>Malva parviflora</i>
Clover, red ¹	<i>Trifolium pratense</i>
Clover, white ¹	<i>Trifolium repens</i>
Cocklebur, common	<i>Xanthium pensylvanicum</i>
Crabgrass, large (hairy) ¹	<i>Digitaria sanguinalis</i>
Crotalaria	<i>Crotalaria species</i>
Croton, tropic	<i>Croton glandulosus</i>
Cudweed, narrowleaf	<i>Gnaphalium falcatum</i>
Eveningprimrose, cutleaf	<i>Oenothera laciniata</i>
Fiddleneck, coast ¹	<i>Amsinckia intermedia</i>
Filaree, broadleaf	<i>Erodium botrys</i>
Filaree, redstem	<i>Erodium cicutarium</i>
Filaree, whitestem	<i>Erodium moschatum</i>
Fireweed (from seed)	<i>Epilobium angustifolium</i>
Flixweed	<i>Descurainia sophia</i>
Foxtail, giant ¹	<i>Setaria faberi</i>
Foxtail, green	<i>Setaria viridis</i>
Foxtail, yellow	<i>Setaria lutescens</i>
Geranium, Carolina	<i>Geranium carolinianum</i>
Goosegrass ¹	<i>Eleusine indica</i>
Groundcherry, cutleaf	<i>Physalis angulata</i>
Groundcherry, Wright	<i>Physalis wrightii</i>
Groundsel, common	<i>Senecio vulgaris</i>
Henbit	<i>Lamium amplexicaule</i>
Horseweed (marestail)	<i>Conyza canadensis</i>
Jimsonweed	<i>Datura stramonium</i>
Johnsongrass, seedling	<i>Sorghum halepense</i>
Knotweed, prostrate	<i>Polygonum aviculare</i>
Ladysthumb (smartweed)	<i>Polygonum persicaria</i>
Lambsquarters, common	<i>Chenopodium album</i>
Lettuce, prickly (china lettuce)	<i>Lactuca serriola</i>
Mallow, little (malva)	<i>Malva parviflora</i>
Mayweed (dog fennel)	<i>Anthemis cotula</i>
Minerslettuce	<i>Montia perfoliata</i>
Morningglory species, annual	<i>Ipomoea species</i>
Morningglory, ivyleaf ¹	<i>Ipomoea hederacea</i>
Morningglory, tall ¹	<i>Ipomoea purpurea</i>
Mustard, black	<i>Brassica nigra</i>
Mustard, blue (purple mustard)	<i>Chorispora tenella</i>
Mustard, common yellow	<i>Brassica campestris</i>
Mustard, hedge	<i>Sisymbrium officinale</i>
Mustard, tumble (Jim hill mustard)	<i>Sisymbrium altissimum</i>
Mustard, wild	<i>Brassica kaber</i>
Nettle, burning	<i>Urtica urens</i>
Nightshade, American black	<i>Solanum americanum</i>
Nightshade, black	<i>Solanum nigrum</i>
Nightshade, hairy	<i>Solanum sarrachoides</i>
Oats, wild	<i>Avena fatua</i>
Orach, red	<i>Atriplex rosea</i>
Oxalis (bermuda buttercup)	<i>Oxalis pes-caprae</i>
Panicum, fall	<i>Panicum dichotomiflorum</i>

Pepperweed, Virginia	<i>Lepidium virginicum</i>
Pepperweed, yellowflower	<i>Lepidium perfoliatum</i>
Pigweed, prostrate	<i>Amaranthus blitoides</i>
Pigweed, redroot	<i>Amaranthus retroflexus</i>
Pimpernel, scarlet	<i>Anagallis arvensis</i>
Poinsettia, wild	<i>Euphorbia heterophylla</i>
Puncturevine	<i>Tribulus terrestris</i>
Purslane, common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Ragweed, common	<i>Ambrosia artemisiifolia</i>
Redmaids	<i>Calandrinia caulescens</i>
Rocket, London	<i>Sisymbrium irio</i>
Ryegrass, Italian	<i>Lolium multiflorum</i>
Sage, lanceleaf	<i>Salvia reflexa</i>
Sandbur, field	<i>Cenchrus incertus</i>
Sandspurry, red	<i>Spergularia rubra</i>
Sesbania, hemp	<i>Sesbania exaltata</i>
Shepherdspurse ¹	<i>Capsella bursa-pastoris</i>
Sicklepod	<i>Cassia obtusifolia</i>
Sida, prickly (teaweed)	<i>Sida spinosa</i>
Signalgrass, broadleaf	<i>Brachiaria platyphylla</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Sorrel, red (from seed)	<i>Rumex acetosella</i>
Sowthistle, annual	<i>Sonchus oleraceus</i>
Speedwell, birdseye	<i>Veronica persica</i>
Spurge, garden	<i>Euphorbia hirta</i>
Spurge, prostrate ²	<i>Euphorbia supina</i>
Spurge, spotted ²	<i>Euphorbia maculata</i>
Spurry, corn	<i>Spergula arvensis</i>
Tansymustard	<i>Descurainia pinnata</i>
Thistle, bull ²	<i>Cirsium vulgare</i>
Thistle, Russian	<i>Salsola kali</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Witchgrass	<i>Panicum capillare</i>
Witchweed	<i>Striga asiatica</i>
Woodsorrel, common yellow ²	<i>Oxalis stricta</i>
¹ Highest rate and/or multiple applications may be required for acceptable control.	
² Preemergence control only.	

Application Methods and Cultural Practices Preemergence Weed Control

Apply the specified rate in a broadcast spray volume [of 15 or more gallons] of water per acre using calibrated spray equipment capable of uniform application to the soil surface. Seedling weeds are controlled as they come in contact with the soil-applied herbicide during emergence. Preemergence weed control is most effective when LIBERTY OXYFLUORFEN 4L is applied to soil surfaces that are clean (free of crop or weed residues or clippings) and weed free. Prior to application, weed or crop residues must be removed by thorough incorporation into the soil using tillage equipment or by blowing the area to be treated. At least 0.25 inch of irrigation or rainfall is required to activate LIBERTY OXYFLUORFEN 4L and must occur within 3 or 4 weeks after application. For optimum results, LIBERTY OXYFLUORFEN 4L must be applied to prepared beds or soil surfaces that will be left undisturbed during the time period for which weed control is desired. Cultural practices that disturb or redistribute surface soil following treatment with LIBERTY OXYFLUORFEN 4L including cutting water furrows will reduce weed control effectiveness.

Application Rates and Rate Ranges: Where rate ranges are given, use the lower rate in the rate range on coarse texture soils with less than 1% organic matter and lighter weed infestations. Use higher rates in the rate range on medium to fine texture soils, soils containing greater than 1% organic matter, heavy weed infestations, or for extended residual preemergence weed control.

Postemergence Weed Control

Apply the specified rate in a broadcast spray volume of 20 or more gallons of water per acre (a minimum 10 gallons if applying LIBERTY OXYFLUORFEN 4L in tank mix with glyphosate). Because LIBERTY OXYFLUORFEN 4L is a contact herbicide, complete and uniform coverage of weed foliage is essential for optimum postemergence control. Increase the spray volume to ensure complete and uniform coverage as weed height and density increases or in the presence of heavy trash (weed or crop residue). Postemergence applications of LIBERTY OXYFLUORFEN 4L are most effective when made to weeds at the seedling stage. Applications made later than the 4-inch or 4 leaf stage may result in partial control or suppression. Postemergence applications must be made to seedling grasses not exceeding the 2-leaf stage. The addition of 0.25% v/v (2 pints per 100 gallons of spray) of an 80% active nonionic surfactant, labeled for application to growing crops, will enhance herbicidal effectiveness in controlling emerged weeds.

Postemergence Application Rates: Where a rate range is given, use a higher rate in the rate range for heavy weed infestations, weeds in advanced stages of growth or for extended residual preemergence weed control following control of existing emerged weeds.

Ground Application

Ground Broadcast: Apply LIBERTY OXYFLUORFEN 4L using conventional low-pressure ground spray equipment with flat fan spray nozzles. Follow manufacturer's specifications for spraying pressure and boom height. An off-center (OC) nozzle positioned at the end of the boom may be desired. Check calibration of spray equipment before each use.

Directed Sprays: Apply LIBERTY OXYFLUORFEN 4L as a coarse low-pressure spray in a spray volume of 20 or more gallons of spray per acre (broadcast basis). Follow manufacturer's specifications for nozzle spacing and operating pressure. Spray must be directed toward the soil at the base of the crop. In row crops, use a minimum of 2 flat fan nozzles per row (one on each side) and for optimum spray coverage use 4 flat fan nozzles per row (two on each side). The 2 forward nozzles must point forward and downward while the rear nozzles must point to the rear and downward. With either sprayer system, nozzles must be adjusted to cover the weed foliage but minimize contact with the crop. **DO NOT** apply with hollow cone nozzles.

IMPORTANT: LIBERTY OXYFLUORFEN 4L is a contact herbicide. Contact of sprays or drift with foliage or green stems can cause severe crop injury. Use directed sprays and spray shields and/or leaf lifters as necessary to minimize contact of spray or drift with crop foliage or stems. Young green stems of woody plants are also susceptible to injury from spray contact. Potential for injury to woody stems diminishes with loss of green color and the development of relatively impervious non-living corky tissue (bark) on the surface of the stem.

Band Application: Application rates listed in this label are for broadcast application. For band application, the rate per broadcast acre must be reduced according to the following formula:

$$\frac{\text{Band Width (in inches)}}{\text{Row Width (in inches)}} \times \text{Rate per Broadcast Acre} = \text{Amount Needed per Acre for Banded Application}$$

Spot Application

For spot application, apply sprays uniformly to soil for preemergence weed control or on a spray-to-wet basis for postemergence weed control. Mix the required amount of LIBERTY OXYFLUORFEN 4L with the specified amount of water. For preemergence weed control, use 0.5 to 1 gallon of spray per 1000 square feet. For postemergence weed control use a minimum of 1 gallon of spray per 1000 square feet and add

an 80% nonionic surfactant at the rate of 0.5 fluid ounce (1 Tablespoon) per gallon of spray. If making spot applications within an established crop, use coarse low-pressure sprays and direct the spray to the soil beneath the plants. To avoid crop injury, **DO NOT** allow spray to contact leaves and stems of herbaceous plants or leaves or green stems of woody plants.

Amount of LIBERTY OXYFLUORFEN 4L Required to Treat 1000 Square Feet at Specified Application Rate					
0.25 pt/acre (0.125 lb ai)	0.5 pt/acre (0.25 lb ai)	1.0 pt/acre (0.5 lb ai)	1.5 pt/acre (0.75 lb ai)	2.0 pt/acre (1.0 lb ai)	4.0 pt/acre (2.0 lb ai)
0.1 fl oz (2.75 ml)	0.2 fl oz (5.5 ml)	0.4 fl oz (11 ml)	0.55 fl oz (16.5 ml)	0.75 fl oz (22 ml)	1.5 fl oz (44 ml)

1 pint = 16 fluid ounces; 1 fluid ounce = 29.6 (30) ml

Aerial Application

Use aerial boom equipment designed for use with herbicides and a minimum spray volume of 10 gallons per acre (5 gallons per acre if tank mixed with glyphosate). **DO NOT** aerially apply LIBERTY OXYFLUORFEN 4L unless crop-specific use directions specifically allow and provide directions for aerial application.

Avoid Drift: Exercise extreme care to avoid herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result. Extreme care must be exercised to prevent spray drift that could result in damage to other crops or desirable vegetation. Adhere to the following guidelines when aerial applications are to be made.

Where states have more stringent regulations, they must be observed.

The use of a drift control agent may be required by local regulations. However, the drift control agent may decrease the weed control effectiveness.

Chemigation Instructions

Apply this product only through sprinkler (center pivot, solid set, portable lateral, or low-volume (micro sprinkler)), drip (trickle), or flood (basin) irrigation systems. Refer to use directions for specific crops for instructions as to which type of irrigation system may be used.

- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
- If you have questions about calibration, contact the State Extension Service specialists, equipment manufacturers, or other experts.
- **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.
- 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 if the need arise.

Restrictions

- **DO NOT** apply this product through any irrigation system unless the instructions for chemigation are followed.
- **DO NOT** apply LIBERTY OXYFLUORFEN 4L through chemigation equipment unless chemigation is allowed by Crop-Specific Use Directions.
- **DO NOT** apply this product through any other type of irrigation system.

Sprinkler Chemigation (Foliar Spray Uses)

For sprinkler irrigation, sufficient water must be applied at the beginning of the irrigation period to insure uniform wetting of the plant and/or soil surfaces. Meter LIBERTY OXYFLUORFEN 4L into the sprinkler irrigation system at a continuous uniform rate during the middle 1/3 of the irrigation period to allow for

uniform distribution to target weeds and/or soil surface. Continue irrigation during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system. During sprinkler irrigation, sufficient water must be applied to insure water penetration to a depth of two inches.

Avoid Drift: Extreme care must be exercised to prevent spray drift that could result in damage to other crops or desirable vegetation. Use the following guidelines when applications of LIBERTY OXYFLUORFEN 4L are made through sprinkler irrigation equipment:

- **DO NOT** apply when the wind direction is not stable, when inversion conditions exist, or when wind velocity exceeds 10 mph.
- When wind speeds are 5 mph or less, maintain a minimum downwind buffer zone of at least 1/2 mile from all crops and desirable vegetation, except for the following:
- Maintain a minimum downwind buffer zone of:
 - 150 feet from dormant tree fruits, dormant vines and overwintering sugar beets.
 - 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seedling sugar beets and vegetable fallow beds.
- When wind speeds are between 5 and 10 mph, downwind buffer zones in excess of those listed above are suggested.
- For upwind and side borders, maintain a minimum buffer zone of 150 feet from any vegetable fallow bed, crop, or desirable vegetation.

To apply a pesticide using sprinkler chemigation, the chemigation system must meet the following specifications:

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

Flood (Basin) Chemigation (Soil Drench Uses)

LIBERTY OXYFLUORFEN 4L must be continuously metered into the water during the entire irrigation period. Agitation in the pesticide supply tank is suggested. Best weed control results from LIBERTY OXYFLUORFEN 4L applied through flood (basin) irrigation systems are obtained when a uniform distribution and flow of irrigation water is maintained over level land.

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity including drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain 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, including a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Drip (Trickle) Chemigation (Soil Drench Uses)

To achieve optimum distribution of LIBERTY OXYFLUORFEN 4L in the soil surface, meter LIBERTY OXYFLUORFEN 4L at a continuous uniform rate during the middle 1/3 of the irrigation period. For best results, LIBERTY OXYFLUORFEN 4L must be uniformly distributed across the wetted area to help reduce the "ring effect" of weed escapes. Continue irrigation during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system.

To apply a pesticide using drip (trickle) chemigation, the chemigation system must meet the following specifications:

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pipe 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 including a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Chemigation Calibration: For Low-Volume Sprinklers (Microsprinklers) and Drip (Trickle) Irrigation Systems

Calculation of use rate is based on wetted area around emitters - NOT on grove acres. To determine correct amount of LIBERTY OXYFLUORFEN 4L, use the following formula:

1. Treated area per each emitter = A

$$A = 3.14 \times (\text{radius} \times \text{radius})$$

Example: If the average distance from emitter to perimeter of wetted area measured at the soil surface is 13 inches, then

$$A = 3.14 \times (13'' \times 13'')$$

$$A = 3.14 \times (169)$$

$$A = 530.7 \text{ square inches}$$

2. The area in square feet wet in each acre = B

$$B = \frac{A \times \text{emitters/acre}}{144}$$

Example: If there are 300 emitters per acre, then
 $B = \frac{530.7 \times 300}{144} = B = 1105.6$ square feet wetted per acre

3. The total area (in square feet) wet by your system = C
 $C = B \times \text{acres covered by system}$

Example: If the system covers 20 acres, then
 $C = 1105.6$ square feet per acre \times 20 acres
 $C = 22,112$ square feet wetted by system

4. Amount of this product to inject = S

Rate per treated acre of this product = R

$$S = \frac{C \times R}{43,560} = \text{quarts of this product}$$

Example: If the desired application rate per treated acre is 1 quart of this product, then

$$S = \frac{22,112 \times 1.0}{43,560} = S = 0.507 \text{ quarts of this product must be injected into system.}$$

Note: Select the proper rate based on weed spectrum and desired length of control (See RATE RANGES section below).

Chemigation Systems Connected to Public Water Systems

If the chemigation system is connected to a public water supply, the following conditions must also be met:

- Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from a point of pesticide introduction. As an option to the RPZ, the water from the public water system must be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shutdown.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, including a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Mixing Directions

Shake well before use. Fill the spray tank at least one-third full of clean water. With the pump and agitator running, add the specified amount of herbicides to the spray tank. The order of addition to the spray tank must be (1) wettable powders, (2) flowables and (3) soluble liquids. Complete filling of the spray tank with water.

Use of Surfactants: For all applications of LIBERTY OXYFLUORFEN 4L where postemergence weed control is desired (except garlic and onions), add a minimum of 2 pints of 80% active nonionic surfactant (cleared for application to growing crops) per each 100 gallons of spray. The addition of 4 pints of nonionic surfactant is advised to enhance postemergence activity when hard water (greater than 600 ppm) is used. Maintain agitation until spraying is completed.

Tank Mixing Precautions

- Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply.

Tank Mixing 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.
- Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply.
- **DO NOT** exceed specified application rates.
- **DO NOT** tank mix this product with another pesticide that contains the same active ingredient as this product unless the label of either tank mix partner specifies the maximum dosages that may be used.

Tank Mix Compatibility Testing: Perform a jar test prior to tank mixing to ensure compatibility of this product and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, gels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination must not be used.

Sprayer Clean-up: Thoroughly flush spray equipment (tank, pump, hoses and boom) with clean water before and after each use. Residues of LIBERTY OXYFLUORFEN 4L remaining in spray equipment may damage other crops. The addition of a non-ionic surfactant to equipment flushing waters at the rate of 1 quart per 100 gallons is specified to aid in removal of residues of LIBERTY OXYFLUORFEN 4L.

Crop-Specific Use Directions

**ARTICHOKE (GLOBE)
For Pre-Transplanting and Post-Crown Planting Applications to Artichokes
(For Use Only in California)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.5 – 2 (0.25 – 1.0 lb ai)	LIBERTY OXYFLUORFEN 4L may be applied for pre-emergence and post-emergence control of listed broadleaf weeds, applied pre-transplant for annual artichokes, and post-transplant for perennial artichokes. LIBERTY OXYFLUORFEN 4L also may be used for layby applications. For pre-transplant applications for annual artichokes, apply 0.5 to 2 pints (0.25 – 1.0 lb ai) per acre, at least two days before transplanting. For post-plant applications over the top of perennial artichokes after planting of crowns, apply 0.5 to 2 pints (0.25 – 1.0 lb ai) per acre, within two days after crown planting and before irrigation. Ground application is advised. For broadcast

		applications, a minimum spray volume of 40 gallons of water per acre is advised. For aerial application, use a minimum of 10 gallons of water per acre.
<p>Precautions:</p> <ul style="list-style-type: none"> Higher rates in this rate range will provide a longer interval of weed control, but may increase the potential for crop injury. During cold, wet growing conditions, the crop is more susceptible to crop injury. In these situations, the lower end of the rate range must be considered. DO NOT use if the risk of crop injury under these conditions is considered unacceptable. Control may be reduced if thorough soil coverage is not achieved. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> DO NOT apply more than 2 pints (1.0 lb ai) per acre per application. Including layby applications, DO NOT apply more than 4 pints (2.0 lb ai) per acre per year. Preharvest Interval (PHI): 90 days. Retreatment Interval: 8 weeks 		

Dosage and Timing

The rates listed on this label are broadcast rates. For banded applications, reduce these rates proportionally to the band width.

Key Weeds Controlled:

Preemergence	Postemergence
cheeseweed (malva) groundsel, common lambsquarters, common mustard, common yellow oxalis (bermuda buttercup)* shepherdspurse sowthistle, annual	cheeseweed (malva) groundsel, common mustard, common yellow nettle, burning oxalis (bermuda buttercup) shepherdspurse sowthistle, annual
*Suppression	

**ARTICHOKE (GLOBE)
Post-Directed Spray Application**

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 – 1.5 lb ai)	<p>Application Method: Apply as a directed spray to the soil surface between the rows and at the base of artichoke plants in a minimum spray volume of 40 gallons per acre.</p> <p>Timing to Crop: Apply after completion of ditching operations. Separate applications of up to 2 pints (1.0 lb ai) per acre may be made 8 to 10 weeks apart or a single application of up to 3 pints (1.5 lb ai) per acre may be made.</p> <p>Timing to Weeds: Preemergence up to 8 leaf stage.</p>
<p>Precautions:</p> <ul style="list-style-type: none"> Application of LIBERTY OXYFLUORFEN 4L to artichoke plantings must be delayed a minimum of 60 days after cutting back or transplanting. 		
<p>Restrictions:</p> <ul style="list-style-type: none"> DO NOT apply over-the-top. Contact with direct spray or drift will cause injury to artichoke fronds or severe injury to buds or flowers. DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. DO NOT apply more than 3 pints (1.5 lb ai) per acre per year. DO NOT make more than 2 application per acre per year when using reduced application rates. 		

- **Retreatment Interval:** 8 weeks
- **Preharvest Interval (PHI):** 5 days

Key Weeds Controlled:

Preemergence	Postemergence
cheeseweed (malva) groundsel, common lambsquarters, common mustard, common yellow oxalis (bermuda buttercup)* shepherdspurse sowthistle, annual	cheeseweed (malva) groundsel, common mustard, common yellow nettle, burning oxalis (bermuda buttercup) shepherdspurse sowthistle, annual
*Suppression	

**BLACKBERRY AND RASPBERRY PRIMOCANE SUPPRESSION
(For Use Only in Oregon and Washington)**

Crop	Rate (pt/acre)*	Specific Use Directions
Blackberry	0.8 - 1.6 (0.4 – 0.8 lb ai)	Apply LIBERTY OXYFLUORFEN 4L in a minimum spray volume of 50 gallons per broadcast acre to primocanes which have emerged 4 to 6 inches. Proper timing of the spray application is essential. Application to primocanes greater than 6 inches may result in unacceptable cane growth (bent canes). The highest use rate and/or additional applications may be required to achieve acceptable suppression of vigorous early season primocane growth. On shorter season plantings (in higher elevations) or plantings grown on light (sandy) textured soils, reduced rates may provide acceptable primocane suppression. Primocane suppression from LIBERTY OXYFLUORFEN 4L may last from 3 to 6 weeks, therefore, timing, rate, and number of applications must be adjusted according to plant health and vigor and the desired length of primocane suppression. The addition of 2 pints of an 80% active nonionic surfactant cleared for application to growing crops) per 100 gallons of spray solution is advised.
Raspberry	0.38 – 1.5 (0.19 – 0.38 lb ai)	

Precautions:

- Occasionally, after the use of this product, a spotting, crinkling or flecking may appear on the leaves of the fruiting canes. Some blackberry varieties may be more sensitive than others. This is to be expected and does not affect performance or yield. Leaves of the fruiting canes which receive direct or indirect (drift) spray contact will be injured.

Restriction:

- **DO NOT** use this product on blackberry plantings which are weak or under stress, due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture, as primocane growth may be insufficient for the following year's crop.

Crop-Specific Restrictions:

- **Chemigation: DO NOT** apply this product through any type of irrigation system.
- This product must be applied only by ground application equipment.
- This product is phytotoxic to plant foliage. Avoid accidental spray contact or drift with established crops
- **DO NOT** apply when weather conditions favor drift to non-target areas.
- **DO NOT** treat ditch banks or waterways with this product or contaminate water used for irrigation

or domestic purposes.

- **Retreatment Interval:** 8 weeks

Blackberry

- **DO NOT** apply more than 1.6 pints (0.8 lb ai) per broadcast acre per application.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per broadcast acre per year.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **Preharvest Interval (PHI):** 15 days

Raspberry

- **DO NOT** apply more than 1.5 pints (0.75 lb ai) per broadcast acre per application.
- **DO NOT** apply more than 2.5 pints (1.25 lb ai) per broadcast acre per year.
- **DO NOT** make more than 2 applications per year when using reduced application rates.
- **Preharvest Interval (PHI):** 50 days

*Dosages listed are for broadcast application. See Ground Application section of this label for conversion to band application rates.

**BLACKBERRY PRIMOCANE SUPPRESSION DURING
NONBEARING YEAR OF ALTERNATE YEAR BLACKBERRY PRODUCTION
(For Use Only in Oregon)**

Crop	Rate (pt/acre)*	Specific Use Directions
Blackberry	0.5 - 1 (0.25 – 0.5 lb ai)	Apply LIBERTY OXYFLUORFEN 4L to the unwanted vegetative growth at the base of the blackberry plants. The addition of 2 pints of an 80% active nonionic surfactant cleared for application to growing crops) per 100 gallons of spray solution is advised. LIBERTY OXYFLUORFEN 4L must be applied after a sufficient number of canes have been bundled and trained to the trellis wire. The first application is made when the primocanes to be saved have reached either the bottom wire or approximately 4 feet in length (typically early to mid-June). LIBERTY OXYFLUORFEN 4L must be directed to the lower portion of the canes to reduce unwanted lateral growth and excessive foliage that normally develops at the base of each plant. The primocanes to be saved must be trained at an adequate height above the directed spray. A second application (typically mid-June to mid-September after the primocanes are trellised and wrapped on wire) may be applied to suppress new growth, leaves and lateral spurs that develop at the base of the plant. Application timing will vary according to location and vigor of planting. Spray coverage is essential for optimum activity on unwanted vegetation. LIBERTY OXYFLUORFEN 4L must be applied at a minimum of 30 gallons of water per broadcast acre in a 3-foot band directed towards the lower portion of the blackberry canes in the primocane row. Use a low-pressure spray system (suggested 30 to 60 psi). Mounted nozzles are to be used to deliver the spray solution. Spray equipment must be calibrated carefully before each use.

Precautions:

- Occasionally, after the use of this product, a spotting, crinkling or flecking may appear on the leaves of the vegetative canes. This is to be expected and does not affect plant health, performance or yield. Leaves of the vegetative canes that receive direct or indirect (drift) spray

contact will be injured.

Crop-Specific Restrictions:

- **Chemigation: DO NOT** apply this product through any type of irrigation system.
- This product must be applied only by ground application equipment.
- This product is phytotoxic to plant foliage. Avoid accidental spray contact or drift with established crops. **DO NOT** apply when weather conditions favor drift to non-target areas.
- **DO NOT** apply more than 2 pints (1.0 lb ai) per broadcast acre per application.
- **DO NOT** apply more than 4 pints (2.0 lb ai) per broadcast acre per year.
- **DO NOT** make more than 2 applications per acre per year.
- **Retreatment Interval:** 8 weeks
- For application only during the nonbearing year of blackberries grown using Alternate Year (AY) management system.
- **DO NOT** apply this product to blackberries during the bearing season.
- **DO NOT** use this product on blackberry plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.

*Dosages listed are for broadcast application. See Ground Application section of this label for conversion to band application rates.

BROCCOLI / CABBAGE / CAULIFLOWER

Pre-Transplant (Preplant) Application for Preemergence Broadleaf Weed Control

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	0.5 – 1 (0.25 – 0.5 lb ai)	<p>Pre-Transplant Application Only: Apply broadcast to final seedbed prior to transplanting. Use lower rate in the rate range on coarse-textured soils with less than 1% organic matter. Use the highest rate in the rate range on medium-to fine-textured soils or soils containing greater than 1% organic matter.</p> <p>Transplanting must be accomplished with minimal soil disturbance and soil left undisturbed during the time weed control is desired.</p>

Precautions:

- Pre-transplant applications may result in initial, but temporary, crop injury (leaf cupping or crinkling) and is enhanced if crop leaves come in direct contact with treated soil. Crop will rapidly outgrow this condition and develop normally. Severe crop injury may result if transplants are under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides or storage conditions. The use of transplants less than 5 weeks old or use of extremely succulent transplants grown in containers less than 1 inch square may increase the severity of crop injury. Hardening off, increasing the age of transplants or increasing the size of the rooting containers will lessen the possibility and/or severity of potential crop injury.
- LIBERTY OXYFLUORFEN 4L will assist in early season annual grass control, however, a herbicide program for preemergence or postemergence control of annual grasses is advised.
- Applications to muck soils may result in partial weed control or suppression.
- Furrow and drip irrigation immediately after transplanting and under high temperatures can result in increased crop injury. Sprinkler irrigation is advised during early establishment of transplants. If these conditions cannot be met, LIBERTY OXYFLUORFEN 4L must not be used.

Crop-Specific Restrictions:

- **DO NOT** apply more than 1 pint (0.5 lb ai) broadcast per acre per application.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
- **DO NOT** make more than 1 application per acre per year.
- **DO NOT** apply this product if an acetanilide herbicide including S-metolachlor or alachlor has been applied to the field during the current growing season as severe crop injury may occur.
- **DO NOT** apply this product as a preemergence treatment to direct-seeded broccoli, cabbage or cauliflower.
- **DO NOT** apply this product post-transplant or over-the-top of broccoli, cabbage or cauliflower.

Key Weeds Controlled:

Preemergence	
Carpetweed Pigweed, Redroot	Purslane, Common Smartweed, Pennsylvania

BROCCOLI / CAULIFLOWER / CABBAGE
Postemergence Application
(For Use Only in Arizona, Michigan and New York)

Weed Control	Rate (pt/acre)	Specific Use Directions
Postemergence	0.25 – 0.375 (0.125 – 0.188 lb ai)	Apply LIBERTY OXYFLUORFEN 4L as a broadcast or directed spray for the postemergence suppression/control of susceptible broadleaf weed species in direct-seeded or transplanted broccoli, cauliflower cabbage. Apply LIBERTY OXYFLUORFEN 4L as a broadcast postemergence application at the rate of 4 to 6 fluid ounces (0.125-0.188 lb ai) per acre. LIBERTY OXYFLUORFEN 4L can also be applied as a directed application at a rate of 4 to 8 fluid ounces (0.125-0.25 lb ai) per acre. Directed applications are those where spray mixtures are applied in such a way as to minimize contact to crop leaves, directing the spray toward the soil at the base of the crop. For direct-seeded crops, apply when the crop reaches a minimum of four true leaves. For transplanted crops, apply after a minimum of two weeks after planting.
Directed spray	0.25 – 0.5 (0.125 – 0.25 lb ai)	

Precautions:

- Apply only with ground equipment in a spray volume of 20 gallons or more of water per acre. Increase the spray volume to ensure complete and uniform coverage as weed height and density increases. Use a low-pressure sprayer equipped with flat fan nozzles operated at the manufacturer's specified pressure.

Crop-Specific Restrictions:

- For direct-seeded crops, **DO NOT** apply more the 8 fluid ounces (0.25 lb ai) per acre per crop as a post emergence treatment.
- For transplanted crops, **DO NOT** apply more than 8 fluid ounces (0.25 lb ai) per acre per crop as a post-transplant treatment per year.
- If a pre-transplant (preplant) treatment has previously been made, the combination of pre- plus post-transplant treatments must not exceed 16 fluid ounces (0.5 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per crop per year.
- **DO NOT** add any adjuvant or liquid fertilizer to the spray mixture.
- For postemergence use in broccoli and cauliflower, **DO NOT** mix LIBERTY OXYFLUORFEN 4L

with adjuvants (oils, surfactants), liquid fertilizer, or pesticides.

- **Preharvest Interval (PHI):** 35 days
- **DO NOT** apply when weather conditions favor drift. Avoid drift to all nontarget areas. LIBERTY OXYFLUORFEN 4L is phytotoxic to susceptible plant foliage. **DO NOT** apply through any type of irrigation equipment in these states.

Crop Resistance Information

Broccoli, cauliflower and cabbage are tolerant to postemergence applications of LIBERTY OXYFLUORFEN 4L; however, under certain conditions, LIBERTY OXYFLUORFEN 4L can cause severe crop injury. Application to crops grown under very mild (cool, cloudy) conditions can produce leaf cupping, crinkling, stunting, or necrotic lesions. When injury occurs, it is usually limited to the treated leaves with new leaves emerging undamaged. Delay in crop development and/or maturity and yield reduction can result under these conditions. **DO NOT** use LIBERTY OXYFLUORFEN 4L on plants that are weakened or are under stress due to temperature, disease, fertilizer, soil salts, nematodes, insects, pesticides, drought, excessive moisture, flooding, or soil crusting.

Weeds Controlled or Suppressed Postemergence

LIBERTY OXYFLUORFEN 4L provides postemergence control/suppression of the following weeds when used at specified dosages:

Common Name	Scientific Name
Cheeseweed (Malva)	<i>Malva parviflora</i>
Nettle, Burning	<i>Urtica urens</i>
Nightshade, Black	<i>Solanum nigrum</i>
Pigweed, Redroot	<i>Amaranthus retroflex us</i>
Purslane, Common	<i>Portulaca oleracea</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Sowthistle, Annual	<i>Sonchus oleraceus</i>

Cultural Considerations

For best weed control results, apply LIBERTY OXYFLUORFEN 4L to young (1-4 leaf), actively growing weeds.

**BROCCOLI/CAULIFLOWER
Postemergence Application
(For Use Only in California)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Postemergence	0.25 – 0.375 (0.125 – 0.188 lb ai)	Apply LIBERTY OXYFLUORFEN 4L as a broadcast or directed spray for the postemergence suppression/control of susceptible broadleaf weed species in direct-seeded or transplanted broccoli and cauliflower.
Directed Spray	0.25 – 0.5 (0.125 – 0.25 lb ai)	Apply LIBERTY OXYFLUORFEN 4L as a broadcast postemergence application at the rate of 4 to 6 fluid ounces (0.125-0.188 lb ai) per acre. LIBERTY OXYFLUORFEN 4L can also be applied as a directed application at a rate of 4 to 8 fluid ounces (0.125-0.25 lb ai) per acre. Directed applications are those where spray mixtures are applied in such a way as to minimize contact to crop leaves, directing the spray toward the soil at the base of the crop.
For direct-seeded crops, apply when the crop reaches		

		a minimum of four true leaves. For transplanted crops, apply after a minimum of two weeks after planting.
Precautions:		
<ul style="list-style-type: none"> • Apply only with ground equipment in a spray volume of 20 gallons or more of water per acre. Increase the spray volume to ensure complete and uniform coverage as weed height and density increases. Use a low-pressure sprayer equipped with flat fan nozzles operated at the manufacturer's specified pressure. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • For direct-seeded crops, DO NOT apply more than 8 fluid ounces (0.25 lb ai) per acre per crop as a post emergence treatment. • For transplanted crops, DO NOT apply more than 8 fluid ounces (0.25 lb ai) per acre per crop as a post-transplant treatment per year. • If a pre-transplant (preplant) treatment has previously been made, the combination of pre- plus post-transplant treatments must not exceed 16 fluid ounces (0.5 lb ai) per acre per year. • DO NOT make more than 2 application per crop per year. • DO NOT add any adjuvant or liquid fertilizer to the spray mixture. • For postemergence use in broccoli and cauliflower, DO NOT mix this product with adjuvants (oils, surfactants), liquid fertilizer, or pesticides. • Preharvest Interval (PHI): 35 days • DO NOT apply when weather conditions favor drift. Avoid drift to all nontarget areas. This product is phytotoxic to susceptible plant foliage. 		

Crop Resistance Information

Broccoli and cauliflower are tolerant to postemergence applications of LIBERTY OXYFLUORFEN 4L; however, under certain conditions, LIBERTY OXYFLUORFEN 4L can cause severe crop injury. Application to crops grown under very mild (cool, cloudy) conditions can produce leaf cupping, crinkling, stunting, or necrotic lesions. When injury occurs, it is usually limited to the treated leaves with new leaves emerging undamaged. Delay in crop development and/or maturity and yield reduction can result under these conditions. **DO NOT** use LIBERTY OXYFLUORFEN 4L on plants that are weakened or are under stress due to temperature, disease, fertilizer, soil salts, nematodes, insects, pesticides, drought, excessive moisture, flooding, or soil crusting.

Weeds Controlled or Suppressed Postemergence

LIBERTY OXYFLUORFEN 4L provides postemergence control/suppression of the following weeds when used at specified dosages.

Common Name	Scientific Name
Cheeseweed (Malva)	<i>Malva parviflora</i>
Nettle, Burning	<i>Urtica urens</i>
Nightshade, Black	<i>Solanum nigrum</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Purslane, Common	<i>Portulaca oleracea</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Sowthistle, Annual	<i>Sonchus oleraceus</i>

Cultural Considerations

For best weed control results, apply when LIBERTY OXYFLUORFEN 4L to young (1-4 leaf), actively growing weeds.

CACAO (BEARING AND NONBEARING) (For Use Only in Hawaii)

LIBERTY OXYFLUORFEN 4L may be applied as a pre-transplant treatment or to established or recently transplanted cacao.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	1 – 4 (0.5 – 2.0 lb ai)	Pre-transplant Application: Up to 2 pints (1.0 lb ai) per broadcast acre may be applied as a pre-transplant application. Application to Established Plantings: In established plantings, including recently transplanted cacao plants, apply as a directed spray to the orchard floor. Use higher rates in rate range and increase spray volume to control dense growth of existing weeds or for extended residual preemergence weed control.
Precautions:		
<ul style="list-style-type: none"> This product must be applied to only healthy growing trees/transplants of suitable size to allow directed sprays. Avoid spray contact with foliage. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> DO NOT apply preplant or preemergence to direct-seeded cacao. DO NOT apply more than 4 pints (2.0 lb ai) per acre per application. DO NOT apply more than 12 pints (6.0 lb ai) per acre per year. DO NOT make more than 4 application per acre per year when using reduced application rates. Retreatment Interval: 10 weeks Preharvest Interval (PHI): 1 day 		

Key Weeds Controlled:

Preemergence	Postemergence
Ageratum Buttonweed Crotalaria Purslane, Common Spurge, Garden	Purslane, Common Spurge, Garden

CITRUS (NONBEARING)

Citrus, including Calamondin, Chironja, Citrus Citron, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Pummelo, Satsuma Mandarin, Sour Orange, Sweet Orange, Tangelo, Tangerine, Tangor

LIBERTY OXYFLUORFEN 4L may be applied only in non-bearing citrus orchards. Apply only as a directed spray to the orchard floor avoiding contact with citrus foliage.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	3 (1.5 lb ai)	Preemergence Weed Control: Up to 3 pints (1.5 lb ai) per acre may be applied for residual preemergence weed control. Postemergence Weed Control: The 3 pints (1.5 lb ai) per acre rate will control weeds up to 4 inches tall. Weeds greater than 4-leaf or 4 inches tall may be partially controlled. Use sufficient spray volume for complete and uniform coverage of weeds. Increase the spray volume with increased weed height and density to ensure complete coverage.
Postemergence	1 – 3 (0.5 – 1.5 lb ai)	
Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions.		
<ul style="list-style-type: none"> Preemergence Use: For residual control of grass weeds, this product may be tank mixed with grass herbicides labeled for use in citrus. Postemergence Use: For broader spectrum postemergence control of emerged grass and broadleaf weeds, this product may be tank mixed with paraquat or glyphosate. 		

Crop-Specific Restrictions:

- Apply this product only to nonbearing citrus (trees that will not bear fruit for one year).
- **DO NOT** apply during periods of new citrus foliage growth. Applications must be made after foliage has fully expanded and hardened off. Avoid direct spray contact with citrus foliage.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per application.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per year.
- **DO NOT** make more than 3 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 8 weeks
- **Preharvest Interval (PHI):** 365 days

(Arizona and California)		(Florida, Louisiana and Texas)	
Preemergence	Postemergence	Preemergence	Postemergence
burclover cheeseweed (malva) fiddleneck, coast filaree, broadleaf filaree, redstem filaree, whitestem groundsel, common henbit knotweed, prostrate lambsquarters, common lettuce, prickly pigweed, red root purslane, common redmaids rocket, London shepherdspurse sowthistle, annual spurge, prostrate spurge, spotted	cheeseweed (malva) fiddleneck, coast filaree, broadleaf* filaree, redstem* filaree, whitestem* groundsel, common henbit minerslettuce nettle, burning pigweed, red root redmaids shepherdspurse sowthistle, annual	cudweed, narrowleaf eveningprimrose, cutleaf** groundcherry, cutleaf lambsquarters, common nightshade, American black nightshade, black pepperweed, Virginia pigweed, red root poinsettia, wild pusley, Florida sida, prickly (teaweed) smartweed, Pennsylvania sowthistle, annual spurge, prostrate spurge, spotted	balsamapple cudweed, narrowleaf*** eveningprimrose, cutleaf** groundcherry, cutleaf groundcherry, Wright lambsquarters, common morningglory, annual nightshade, American black nightshade, black pepperweed, Virginia pigweed, redroot poinsettia, wild purslane, common pusley, Florida sida, prickly (teaweed) smartweed, Pennsylvania sowthistle, annual
<p>* This product at the 3 pints (1.5 lb ai) per acre will provide control of filaree and other weeds up to 4-inch stage. Applications to weeds beyond the 4-inch stage may result in partial control.</p> <p>** Highest rate and/or multiple applications may be required for acceptable control.</p> <p>*** Maximum 0.5-inch diameter.</p>			

**COFFEE (BEARING AND NONBEARING)
(For Use Only in Hawaii)**

LIBERTY OXYFLUORFEN 4L may be applied to established coffee, recently transplanted coffee, or as a pre-transplant treatment. In established non-dormant coffee, apply as a directed spray avoiding contact with crop foliage. Newly established transplants must be healthy and well established and of sufficient size to allow use of directed sprays without contacting crop foliage.

LIBERTY OXYFLUORFEN 4L may be applied over-the-top of dormant coffee transplants. Transplants are considered to be dormant when active terminal growth has ceased and terminal buds have formed. Application over-the top of coffee plants after buds start to swell (a sign that new growth has resumed) may result in crop injury.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	1 – 4 (0.5 – 2.0 lb ai)	Preemergence Weed Control: • Apply as a directed spray to the orchard floor

		<p>beneath established coffee plants.</p> <ul style="list-style-type: none"> Up to 2 pints (1 lb ai) per acre may be applied as a pre-transplant application prior to transplanting coffee plants. <p>Postemergence Weed Control: Increase the spray volume when weed growth is dense or trash is present; or use a higher rate within the rate range for extended residual preemergence weed control.</p>
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Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. Apply tank mixes only as directed sprays.

Crop-Specific Restrictions:

- To prevent foliar injury, **DO NOT** apply during periods of rapid new growth or allow spray or drift to contact actively growing foliage.
- DO NOT** apply preplant or preemergence to direct-seeded coffee.
- DO NOT** apply more than 4 pints (2.0 lb ai) per broadcast acre per application.
- DO NOT** apply more than 12 pints of LIBERTY OXYFLUORFEN 4L (6.0 lb ai) per broadcast acre per year.
- DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- Retreatment Interval:** 10 weeks
- Preharvest Interval (PHI):** 1 day

Key Weeds Controlled:

Preemergence	Postemergence
Ageratum Buttonweed Crotalaria Purslane, Common Spurge, Garden	Purslane, Common Spurge, Garden

CONIFER SEEDBEDS, TRANSPLANTS, CONTAINER STOCK AND SELECTED FIELD-GROWN DECIDUOUS TREES

Key Weeds Controlled: When LIBERTY OXYFLUORFEN 4L is applied preemergence or postemergence at specified dosages and weed stages.

Barnyardgrass ¹	mustard, blue
bedstraw, catchweed	mustard, tumble
bittercress, lesser	mustard, wild
bluegrass, annual ¹	nettle, burning
buckwheat, wild	nightshade, black
burclover	nightshade, hairy
carpetweed	oats, wild
clover, red ¹	orach, red
clover, white ¹	pepperweed, yellowflower
cocklebur, common	pigweed, prostrate
crabgrass, large ¹	pigweed, red root
fiddleneck, coast ¹	pimpernel, scarlet
filaree, broadleaf	purslane, common
filaree, redstem	redmaids
fireweed (from seed)	rocket, London
flixweed	sandspurry, red
foxtail, giant ¹	Shepherdspurse ¹
Goosegrass ¹	sida, prickly
groundcherry, cutleaf	smartweed, Pennsylvania
groundcherry, Wright	sorrel, red (from seed)

groundsel, common	sowthistle, annual
henbit	speedwell, birdseye
jimsonweed	spurge, prostrate ²
knotweed, prostrate	spurge, spotted ²
ladysthumb	spurry, corn
lambsquarters, common	tansymustard
lettuce, prickly	thistle, bull ²
mallow, little	thistle, Russian
mayweed	velvetleaf
minerslettuce	witchgrass
morningglory, ivyleaf ¹	woodsorrel, yellow ²
morningglory, tall ¹	
¹ Highest rate and/or multiple applications may be required for acceptable control.	
² Preemergence control only.	

CONIFER SEEDBEDS

LIBERTY OXYFLUORFEN 4L provides both postemergence and residual preemergence control of many broadleaf weeds and annual grass species.

Seeded conifers are tolerant to preemergence and postemergence applications of LIBERTY OXYFLUORFEN 4L. For weed control during the establishment of conifer seedlings, LIBERTY OXYFLUORFEN 4L can be applied after seeding of conifers, but prior to emergence. For weed control in emerged conifers, LIBERTY OXYFLUORFEN 4L may be applied over-the-top, but application must be delayed a minimum of 5 weeks after seedling emergence. If application is made during cool, cloudy weather, make certain that seedlings have hardened-off prior to spraying.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	0.5 – 2 (0.25 – 1.0 lb ai)	Application after planting, but prior to emergence of conifer seedlings: Where grass weeds are present, apply 1 to 2 pints (0.5 – 1.0 lb ai) of LIBERTY OXYFLUORFEN 4L per acre. In known areas of high weed competition, apply 2 pints (1.0 lb ai) of LIBERTY OXYFLUORFEN 4L per acre. Broadcast to beds and irrigate with 1/2 to 3/4 inch of sprinkler irrigation before weed emergence. LIBERTY OXYFLUORFEN 4L is most effective on annual grasses when applied preemergence.
Postemergence	0.5 – 1 (0.25 - 0.5 lb ai)	Application after emergence of conifer seedlings: Application must be made to seedling weeds less than 4 inches in height (seedling grasses not exceeding the 2-leaf stage). Depending on subsequent weed flushes, multiple applications may be necessary to achieve season-long weed control.
Chemigation: LIBERTY OXYFLUORFEN 4L may be applied at labeled rates through sprinkler irrigation systems. For center pivot irrigation systems, apply the specified dosage of this product per acre metered at a continuous uniform rate during the entire irrigation period, otherwise meter LIBERTY OXYFLUORFEN 4L at a continuous uniform rate during the middle 1/3 of the irrigation period. When applying by sprinkler irrigation, follow directions given in the Chemigation Instructions section of this label.		
Precautions:		
<ul style="list-style-type: none"> Occasionally spotting, crinkling, or flecking may appear on leaves of conifers. Leaves that receive direct spray or drift may be injured, but typically outgrow this condition rapidly and develop normally. Apply this product only to healthy conifer stock. 		

- **DO NOT** apply this product in an enclosed greenhouse structure as injury to plant foliage may result.

Crop-Specific Restrictions:

- **DO NOT** apply more than 2 pints (1.0 lb ai) per acre per application.
- **DO NOT** apply more than 4 pints (2.0 lb ai) per acre per year.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 8 weeks
- **DO NOT** store or transport treated container stock in an enclosed structure until completion of 4 irrigations (minimum 21 days) as injury to non-labeled plants may occur.
- **DO NOT** apply this product to conifers that are under stress from excessive fertilizer or soil salts, disease, nematodes, frost, drought, flooding, previously-applied pesticides, soil insects, or winter injury, as severe injury may result.
- **DO NOT** graze or harvest livestock forage from treated areas.

LIBERTY OXYFLUORFEN 4L may be applied to conifer seedbeds of the following species:

Important: When applied as directed, the conifer species listed on this label have shown resistance to LIBERTY OXYFLUORFEN 4L. It is impossible, however, to evaluate this product on all varieties, biotypes and cultivars of listed species under all possible growing conditions. Until familiar with results under local growing conditions, the user must exercise reasonable judgment and caution with this product. Limit application of this product to a few plants in a small area to determine plant resistance and extent of injury if such occurs, prior to initiating large-scale applications.

Douglas Fir	<i>Pseudotsuga menziesii</i>
Fir	Fraser (<i>Abies fraseri</i>) Grand (<i>Abies grandis</i>) Noble (<i>Abies procera</i>)
Hemlock	Eastern hemlock (<i>Tsuga canadensis</i>) Western hemlock (<i>Tsuga heterophylla</i>)
Pine	Austrian (<i>Pinus nigra</i>) Eastern White (<i>Pinus strobus</i>) Himalayan (<i>Pinus wallichiana</i>) Jack (<i>Pinus banksiana</i>) Loblolly (<i>Pinus taeda</i>) Lodgepole (<i>Pinus contorta</i>) Longleaf (<i>Pinus palustris</i>) Monterey (<i>Pinus radiata</i>) Mugho (<i>Pinus mugo</i>) Ponderosa (<i>Pinus ponderosa</i>) Scotch (<i>Pinus sylvestris</i>) Shortleaf (<i>Pinus echinata</i>) Slash (<i>Pinus elliotii</i>) Virginia (<i>Pinus virginiana</i>)
Spruce	Blue (<i>Picea pungens</i>) Dwarf (<i>Picea glauca Conica</i>) Norway[*] (<i>Picea abies</i>) Sitka[*] (<i>Picea sitchensis</i>)

**CONIFER TRANSPLANTS AND CONTAINER STOCK
(INCLUDES 2-0 SEEDLING AND CHRISTMAS TREE PLANTINGS)**

Many container-grown conifers and conifer transplants are resistant to preemergence and postemergence applications of LIBERTY OXYFLUORFEN 4L. Applied postemergence, LIBERTY OXYFLUORFEN 4L provides postemergence control of emerged weeds and preemergence residual control of many broadleaf weeds and grasses (see Key Weeds Controlled) at the beginning of this section.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 4 (1.0 – 2.0 lb ai)	Transplanted and Container Grown Conifers: For best results, preemergence applications must be made immediately after transplanting seedlings or to weed-free container stock. Postemergence applications must be made to weeds less than 4 inches in height. Two applications may be necessary, in fall-transplanted conifer fields, for season-long weed control. The addition of a non-ionic surfactant (0.25% v/v) labeled for application to growing crops, enhances the activity of LIBERTY OXYFLUORFEN 4L on emerged weeds.
Crop-Specific Restrictions: <ul style="list-style-type: none"> • DO NOT make over-the-top applications during periods of active conifer growth. Apply only before bud break or after new terminal growth has hardened off. • DO NOT apply more than 4 pints (2.0 lb ai) per acre per application. • DO NOT apply more than 8 pints (4.0 lb ai) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks • DO NOT graze or harvest livestock forage from treated areas 		

In addition to those conifer species listed under the Conifer Seedbed section, the following conifer species have been shown to be tolerant to LIBERTY OXYFLUORFEN 4L:

Arborvitae	<i>Thuja occidentalis</i> <i>Thuja orientalis</i>
Juniper	<i>Juniperus chinensis</i> <i>Juniperus horizontalis</i> <i>Juniperus procumbens</i> <i>Juniperus sabina</i> <i>Juniperus scopolorum</i>
Red cedar	<i>Juniperus viminiana</i>
Western hemlock	<i>Tsuga heterophylla</i>
Yew	<i>Taxus species</i>

SELECTED FIELD-GROWN DECIDUOUS TREES

Listed field-grown deciduous trees are tolerant only to directed spray applications of LIBERTY OXYFLUORFEN 4L. LIBERTY OXYFLUORFEN 4L provides both preemergence and postemergence control of listed broadleaf weeds and grasses.

Timing to Crop: Apply LIBERTY OXYFLUORFEN 4L to established deciduous trees or after transplanting. For optimum weed control, applications must be made prior to weed germination. Apply only as a directed spray to soil beneath the trees.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Early postemergence	1 – 3 (0.5 – 1.5 lb ai)	LIBERTY OXYFLUORFEN 4L may be applied to established deciduous trees or after transplanting as a single or split application. Apply as a directed spray to the soil surface. Use spray shields to reduce exposure of foliage and bark. The addition of a non-ionic surfactant (0.25% v/v) labeled for application to growing crops, will enhance herbicidal

		activity on emerged weeds. Spot Application: Spot treatments at specified rates may be used to control localized weed infestations. See use directions for Spot Application in the APPLICATION METHODS AND CULTURAL PRACTICES section.
Tank Mixing: For broader spectrum control, LIBERTY OXYFLUORFEN 4L may be tank mixed with other preemergence or postemergence herbicides registered for this use in deciduous trees. Refer to MIXING DIRECTIONS section for Tank Mixing Precautions.		
Precautions:		
<ul style="list-style-type: none"> • For maximum crop safety, directed applications must be made prior to budbreak in the spring or after trees have initiated dormancy in the fall. Avoid contact of spray or drift with foliage or stems with green bark. Application after bud swell may result in crop injury. If a non-dormant application is required due to weed competition, apply only after foliage has fully expanded and hardened off. Use only directed sprays and spray shields to prevent spray contact with stems with green bark or foliage. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT apply this product to trees that have been weakened or are under stress from excessive fertilizer or soil salts, disease, nematodes, frost, wind injury, drought, flooding, previously-applied pesticides, insects, or winter injury as severe injury may result. • DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. • DO NOT apply more than 3 pints (1.5 lb ai) per acre per year. • DO NOT make more than 3 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks • DO NOT apply to bearing tree fruit, nut and vine crops. For selected bearing tree fruit, nut and vine crops, refer to Tree Fruit/Nut/Vine section of this label for use directions. • DO NOT graze or feed livestock forage cut from areas treated with this product. 		

LIBERTY OXYFLUORFEN 4L may be applied to the following deciduous tree species:

Almond ²	<i>Prunus spp.</i>
Apple ²	<i>Malus X domestica</i>
Apricot ²	<i>Prunus spp.</i>
Ash, Green	<i>Fraxinus pennsylvanica</i>
Ash, White	<i>Fraxinus americana</i>
Birch, River	<i>Betula nigra</i>
Cherry ²	<i>Prunus spp.</i>
Chestnut ²	<i>Castanea spp.</i>
Crabapple ²	<i>Malus spp.</i>
Cottonwood	<i>Populus spp.</i>
Dogwood	<i>Cornus florida</i>
Eucalyptus	<i>Eucalyptus viminalis</i> <i>Eucalyptus pulverulenta</i> <i>Eucalyptus camaldulensis</i>
Filbert ²	<i>Corylus spp.</i>
Lilac	<i>Syringa vulgaris</i>
Locust, Black	<i>Robinia pseudoacacia</i>
Maple, Black ¹	<i>Acer nigrum</i>
Maple, Red ¹	<i>Acer rubrum</i>
Maple, Sugar ¹	<i>Acer saccharum</i>
Myrtle, Crepe	<i>Lagerstroemia indica</i>
Nectarine ²	<i>Prunus spp.</i>
Nut, Hickory ²	<i>Carya spp.</i>

Nut, Macadamia	<i>Macadamia ternifolia</i>
Oak, Chestnut	<i>Quercus prinus</i>
Oak, Cherrybark	<i>Quercus pagoda</i>
Oak, Nuttall	<i>Quercus nuttallii</i>
Oak, Pin	<i>Quercus palustris</i>
Oak, Red	<i>Quercus rubra</i>
Oak, Water	<i>Quercus nigra</i>
Oak, Willow	<i>Quercus phellos</i>
Olive, Russian	<i>Elaeagnus angustifolia</i>
Poplar	<i>Populus</i> spp.
Poplar, Tulip	<i>Liriodendron tulipifera</i>
Peach ²	<i>Prunus persica</i>
Pear ²	<i>Pyrus</i> spp.
Pecan ²	<i>Carya</i> spp.
Pistachio ²	<i>Pistacia vera</i>
Plum ²	<i>Prunus</i> spp.
Prune ²	<i>Prunus</i> spp.
Redbud	<i>Cercis canadensis</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Platanus occidentalis</i>
Walnut, Black ²	<i>Juglans nigra</i>
¹ DO NOT apply to maple trees used for production of maple sap or maple syrup.	
² Apply only to nonbearing trees. For bearing tree fruit, nut and vine crops, refer to specific use directions in the Tree fruit/Nut/Vine section of this label.	

CORN

For Use Only on Field Corn in Conjunction with the USDA Witchweed Eradication Program in North Carolina and South Carolina

Apply LIBERTY OXYFLUORFEN 4L only as a directed spray from May through August for preemergence and postemergence control of witchweed (*Striga asiatica*). Corn must be a minimum of 24 inches tall. Examine witchweed infested fields during the early part of the growing season to determine uniformity of corn stand and grass weed pressure. If necessary, cultivate weed-infested fields prior to initial application of LIBERTY OXYFLUORFEN 4L to allow for optimum soil coverage during the initial application. Fields treated with LIBERTY OXYFLUORFEN 4L must be inspected regularly for any breakthrough of witchweed. If breakthrough occurs, a second application must be made as soon as possible after appearance of witchweed. Repeat treatments must occur prior to bloom stage to prevent seed set.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1 – 1.5 (0.5 – 0.75 lb ai)	Initial Application: Apply as a directed spray over the entire row surface at the rate of 1 pint (0.5 lb ai) per acre. Use up to 3 pints (1.5 lb ai) per acre in areas of heavy witchweed infestation. Use a minimum spray volume of 20 gallons per acre and a non-ionic surfactant at the rate of 2 pints (1 lb ai) per 100 gallons of spray.
Postemergence	0.5 – 1 (0.25 – 0.5 lb ai)	Repeat Applications: In case of witchweed breakthrough a repeat application may be made at 0.5 to 1 pint (0.25 – 0.5 lb ai) per acre.
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> DO NOT spray over the top of the corn, as this may result in severe corn injury. Spray must contact only the lower 3 to 8 inches of the corn stalk and any leaves in this zone. Spray droplets contacting the lower leaves will cause necrotic spotting or streaking of sprayed tissue. 		

- **DO NOT** apply more than 1.5 pints (0.75 lb ai) per acre per application.
- **DO NOT** apply more than 2.5 pints (1.25 lb ai) per acre per year.
- **DO NOT** make more than 3 applications per acre per year when using reduced application rates.
- **Retreatment interval:** 10 weeks
- **Preharvest Interval (PHI):** 60 days
- **DO NOT** use corn plants from a treated field for green chop, ensilage, forage, or fodder.

COTTON

Application Methods and Equipment: LIBERTY OXYFLUORFEN 4L may be applied as a post-direct spray to cotton a minimum of 6 to 8 inches tall. Care must be exercised to avoid spray contact with the cotton leaves. Use rigid precision ground spray equipment and spray shields to prevent spray contact with cotton foliage. Use branch lifters or shields, as necessary, to avoid contact of directed sprays with cotton plant.

Accurate placement of spray nozzles is essential for uniform coverage of weeds and to minimize injury to cotton plants. Use a minimum broadcast spray volume of 20 gallons per acre and operate the sprayer at the minimum spray pressure listed by the spray nozzle manufacturer. LIBERTY OXYFLUORFEN 4L may be applied as a post-directed spray with only 2 flat fan nozzles per row (1 nozzle on each side of the row). For optimum coverage, use 4 flat fan nozzles per row (2 nozzles on each side of the row). The 2 forward nozzles must point forward and downward while the rear nozzles must point to the rear and downward. With either sprayer setup, nozzles must be carefully adjusted to cover the weed foliage with minimum contact to cotton plants. LIBERTY OXYFLUORFEN 4L may also be applied as a banded application. DO NOT use hollow cone nozzles.

Tank Mixing: For control of additional broadleaf and grass weeds, LIBERTY OXYFLUORFEN 4L may be applied as a postemergence directed spray in tank mix combination with other herbicides registered for postemergence use in cotton (see Tank Mixing Precautions under Mixing Directions).

Weed Control	Rate (pt/acre)	Specific Use Directions
Postemergence	0.5 – 1 (0.25 – 0.5 lb ai)	Apply as a post-directed spray. For optimum control, use the 1 pint (0.5 lb ai) per acre rate on actively growing weed seedlings with no more than 4 true leaves (not counting cotyledon leaves). Effective control of succulent weeds at the 2- to 3-leaf stage can usually be obtained at the 0.5 pint (0.25 lb ai) per acre rate. See Mixing Directions for surfactant specifications. Where available, irrigation may be applied prior to application of LIBERTY OXYFLUORFEN 4L to encourage maximum weed emergence. Irrigation following application will improve preemergence activity of LIBERTY OXYFLUORFEN 4L against nightshade and groundcherry species.
Precautions:		
<ul style="list-style-type: none"> • Exercise care to avoid spray contact with cotton leaves. Leaves accidentally sprayed will exhibit necrotic (dead) spots and may be dropped from the plant. Crop injury may be enhanced if application is made when excessive soil moisture is present or rainfall occurs immediately after application; however, cotton will outgrow this condition and develop normally. 		
Crop-Specific Restrictions:		
Western Cotton (AZ and CA):		
<ul style="list-style-type: none"> • DO NOT apply more than 1 pint (0.5 lb ai) per acre per application. • DO NOT apply more than 2 pints (1.0 lb ai) per broadcast acre per year. • DO NOT make more than 2 application per acre per year. 		

- **Retreatment Interval:** 10 weeks
 - **Preharvest Interval (PHI):** 75 days
 - **DO NOT** apply to cotton less than 6 inches tall or severe crop injury will result.
- Southern Cotton (All other states):**
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per application.
 - **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
 - **DO NOT** make more than 2 application per acre per year when using reduced application rates.
 - **Retreatment interval:** 10 weeks
 - **Preharvest Interval (PHI):** 90 days
 - **DO NOT** apply to cotton less than 6 inches tall or severe crop injury will result.

Key Weeds Controlled:

Postemergence	
Cocklebur, Common Croton, Tropic Groundcherry, Cutleaf Groundcherry, Wright Jimsonweed Lambsquarters, Common Morningglory, Annual (Up To 6 Leaf) Nightshade, American Black Nightshade, Black	Nightshade, Hairy Pigweed, Redroot Poinsettia, Wild ¹ Purslane, Common Sesbania, Hemp Sicklepod ² Sida, Prickly (Teaweed) ¹ Smartweed, Pennsylvania Velvetleaf
¹ Multiple applications may be required for acceptable control. ² Post-direct applications of this product will control or suppress seedlings not exceeding the one true leaf stage.	

COTTONWOOD

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 - 1.5 lb ai)	LIBERTY OXYFLUORFEN 4L may be applied as a single or split application. Apply as a directed spray to soil at the base of cottonwood trees. Use the higher rate in the rate range for extended preemergence weed control or for postemergence control of weeds up to the 6 leaf stage. The addition of a non-ionic surfactant at 2 pints per 100 gallons of spray will enhance the postemergence activity of LIBERTY OXYFLUORFEN 4L on emerged weeds.
<p>Precautions:</p> <ul style="list-style-type: none"> • Apply LIBERTY OXYFLUORFEN 4L immediately after transplant only to dormant healthy cottonwood stock. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • In established stands, DO NOT allow sprays of this product to contact cottonwood foliage. In newly established cottonwood plantings, use spray shields, if necessary, to prevent exposure of green bark and foliage. • DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. • DO NOT apply more than 9 pints (4.5 lb ai) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks 		

Key Weeds Controlled:

Groundsel, Common Knotweed, Prostrate Lambsquarters, Common	Mustard, Hedge Shepherdspurse Smartweed, Pennsylvania
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DECIDUOUS TREE PLANTINGS
(For Use Only in Louisiana and Mississippi)

LIBERTY OXYFLUORFEN 4L is an effective herbicide for preemergence and postemergence control of certain broadleaf weeds in deciduous tree plantings. In new plantings, over-the-top applications of LIBERTY OXYFLUORFEN 4L must be made soon after transplanting of dormant deciduous tree seedlings. Subsequent applications can be made to nondormant, fully foliated trees. Over-the-top applications to nondormant trees may result in minor discoloration and spotting of the foliage; however, trees will outgrow this condition. Leaves that are fully expanded and hardened off will exhibit less injury than newly emerged leaves or new bud growth. Applications to newly emerged leaves and/or new bud growth will result in leaf injury and is done at the user's risk.

Dosage: LIBERTY OXYFLUORFEN 4L may be applied at 1 to 4 pints (0.5 to 2 lb ai) per broadcast acre for preemergence and postemergence weed control. A maximum of 4 pints of LIBERTY OXYFLUORFEN 4L (2.0 lb ai) per acre per year may be applied as a result of single or multiple applications. The addition of 1 quart of LA TRG~ A G-98 or a comparable 80% active nonionic surfactant per 100 gallons of spray mix will assist in spray coverage and wetting of weeds for postemergence coverage.

Deciduous Species

Cottonwood, Eastern	<i>Populus deltoides</i>
Oak, Cherrybark	<i>Quercus pagoda</i>
Oak, Nuttall	<i>Quercus nuttallii</i>
Sweetgum	<i>Liquidambar styracifula</i>
Sycamore	<i>Platanus occidentalis</i>

Selected deciduous trees listed on this label have shown resistance to LIBERTY OXYFLUORFEN 4L. It is impossible however, to evaluate this product on all varieties, biotypes and cultivars of listed species on this label under all possible growing conditions. The user must exercise reasonable judgment and caution with this product. Until familiar with results under use growing conditions, limit application of this product to a small treated area to determine plant resistance and extent of injury if such occurs, prior to initiating large-scale applications.

Weeds Controlled: When LIBERTY OXYFLUORFEN 4L is applied preemergence or postemergence to weed seedlings (not exceeding 4- to 6-leaf stage) at specified dosages, the following broadleaf weeds are controlled:

Croton, Tropic Groundcherry, Cutleaf Groundcherry, Wright Groundsel, Common Jimsonweed Knowtweed, Prostrate Morningglory, Annual Mustard, Hedge Nightshade, American Black	Nightshade, Black Nightshade, Hairy Pigweed, Red Root Purslane, Common Sesbania, Hemp *Sida, Prickly (Tea Weed) Smartweed, Pennsylvania Velvetleaf
*Highest rate or multiple applications may be required for acceptable control.	

Timing and Method of Application: For optimum weed control, a dormant over-the-top application of LIBERTY OXYFLUORFEN 4L must be made prior to weed seedling emergence followed by a postemergence application after tree foliage have fully expanded. For weed management programs using only a single application per year, apply LIBERTY OXYFLUORFEN 4L preemergence.

LIBERTY OXYFLUORFEN 4L must be applied at 20 to 40 psi in a minimum of 20 gallons of water per acre depending upon density of emerged weeds. Spray volume must be increased as weed height and density increase. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment must be calibrated carefully before each use.

Mixing Directions: Fill the spray tank at least one-third full of clean water. With the pump and agitator running, add the specified amount of herbicide to the spray tank. Complete filling of the spray tank with water. Maintain agitation until spraying is complete.

EUCALYPTUS

Apply LIBERTY OXYFLUORFEN 4L for preemergence and postemergence control of listed broadleaf weeds in established eucalyptus plantings.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 - 1.5 lb ai)	<p>Directed Spray: LIBERTY OXYFLUORFEN 4L may be applied as a single or split application. Apply as a directed spray to soil at the base of eucalyptus trees.</p> <p>Use the higher rate in the rate range for extended preemergence weed control or for postemergence control of weeds up to the 6 leaf stage.</p> <p>The addition of a non-ionic surfactant at the rate of 2 pints per 100 gallons of spray will enhance the postemergence activity of LIBERTY OXYFLUORFEN 4L on emerged weeds.</p> <p>Over-the-Top Application: In new plantings, apply LIBERTY OXYFLUORFEN 4L just before or immediately after transplanting eucalyptus seedlings that are in a dormant condition (i.e., leaves may be present, but terminal growth has hardened off and terminal buds have formed). In established plantings, LIBERTY OXYFLUORFEN 4L may be applied as an over-the-top spray when plants are in a dormant condition.</p>
<p>Precautions:</p> <ul style="list-style-type: none"> • At transplant, apply this product only to "dormant" healthy eucalyptus stock. In established plantings, use spray shields, if needed, to prevent exposure of foliage and bark of small and/or actively growing plants. • To avoid phytotoxicity, make over-the-top applications only to eucalyptus trees in a dormant condition. DO NOT make over-the-top applications after bud break and resumption of active growth. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. • DO NOT apply more than 9 pints (4.5 lb ai) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks 		

Key Weeds Controlled:

Preemergence	Postemergence
Burclover	Cheeseweed (Malva)
Cheeseweed (Malva)	Fiddleneck, Coast
Fiddleneck, Coast	Filaree, Broad Leaf ¹
Filaree, Broad Leaf	Filaree, Redstem ¹
Filaree, Redstem	Filaree, Whitestem ¹
Filaree, Whitestem	Groundsel, Common

Groundsel, Common Henbit Knotweed, Prostrate Lambsquarters, Common Lettuce, Prickly Pigweed, Redroot Redmaids Rocket, London Shepherdspurse Sowthistle, Annual Spurge, Prostrate Spurge, Spotted	Henbit Minerslettuce Nettle, Burning Pigweed, Redroot Redmaids Shepherdspurse Sowthistle, Annual
¹ At the 3 pint (1.5 lb ai) rate, this product will provide control of filaree up to the 6-leaf stage.	

USE ON FALLOW BEDS

Not for use prior to planting soybeans in California

Used alone or in tank mix combination with glyphosate, LIBERTY OXYFLUORFEN 4L provides preemergence and/or postemergence control of winter annual broadleaf weeds on land to be planted to crops.

Prior to planting, treated fallow beds must be thoroughly tilled (incorporated) to a depth of at least 2.5 inches. LIBERTY OXYFLUORFEN 4L is no longer herbicidally effective once the active layer in the soil surface is disrupted by soil incorporation.

Aerial Application: LIBERTY OXYFLUORFEN 4L may be aerially applied for weed control in fallow beds. Follow requirements for Aerial Application in the Product Information section of this label.

Minimum Treatment to Planting Intervals for listed crops:

Direct-Seeded Crops	LIBERTY OXYFLUORFEN 4L (up to 0.5 pint/acre)	LIBERTY OXYFLUORFEN 4L (>0.5 to 1 pints/acre)
carrot	90 days	90 days
cotton	7 days	7 days
potato	60 days	60 days
sugar beet	60 days	90 days
other root/tuber crops	90 days	90 days
onions	180 days	180 days
other bulb vegetables	180 days	180 days
cabbage	90 days	90 days
cauliflower	90 days	90 days
other brassica crops	120 day	120 days
lettuce	90 days	120 days
other leafy vegetables (except brassica crops)	120 days	120 days
pepper	90 days	120 days
tomato	60 days	120 days
other fruiting vegetables	120 days	120 days
cantaloupe	60 days	90 days
squash	90 days	120 days
watermelon	60 days	60 days
other cucurbits	90 days	120 days
dry beans	60 days	60 days
peanut	60 days	60 days

other legume vegetables	60 days	60 days
safflower	60 days	60 days
Soybeans (Except California)	7 days	7 days
cereal grains: Including barley, buckwheat, corn, proso millet, pearl millet, oats, popcorn; rice, rye, sorghum, triticale, wheat, and wild rice	10 months	10 months
cotton and soybean	(see specific labeling for fallow beds to be planted to cotton or soybeans)	
Transplanted Crops	Minimum Treatment-to-Planting Interval	
	LIBERTY OXYFLUORFEN 4L (up to 0.5 pint/acre)	LIBERTY OXYFLUORFEN 4L (>0.5 to 1 pints/acre)
celery	30 days	30 days
conifer	0 days	0 days
garlic	0 days	30 days
grape/kiwi	0 days	0 days
onion	0 days	30 days
pepper	30 days	30 days
strawberries	30 days	30 days
tomato	30 days	30 days
tree fruit/nut/citrus	0 days	0 days

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.5 – 1 (0.25 – 0.5 lb ai)	<p>Use 20 or more gallons of spray volume per acre and increase spray volume for dense weed growth.</p> <p>Use the 0.5 pint (0.25 lb ai) per acre rate for up to 4 weeks of preemergence control and postemergence control of susceptible weeds up to 4-leaf stage. Use the 1 pint (0.5 lb ai) per acre rate for up to 8 weeks of preemergence control and postemergence control of susceptible weeds up to 6-leaf stage. Best preemergence control is achieved when irrigation or rainfall occurs within 3 or 4 weeks after application.</p> <p>A tank mix with glyphosate is advised if the treatment area contains dense weed populations, oversized weed seedlings, volunteer grains, annual grasses or under unfavorable environmental conditions.</p> <p>Outside of California: For enhanced contact activity (burndown/suppression) tank mix 3.25 fluid ounces (0.1 lb ai) of LIBERTY OXYFLUORFEN 4L with the labeled rate of either glyphosate or paraquat.</p> <p>Apply at the application rate and weed growth stages specified in the respective tank mix product</p>

		label.
<p>Precautions:</p> <ul style="list-style-type: none"> • Failure to achieve thorough and complete incorporation, or to follow the specified treatment planting interval, may result in stand reduction and/or vigor reduction of the planted crop. • Crop injury may be enhanced if newly seeded crops or transplants are under stress due to drought, flooding, excessive fertilizer or soil salts, low soil temperatures, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects or diseases. • Exercise extreme care to avoid herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 1 pint (0.5 lb ai) per acre per application. • DO NOT apply more than 1 pint (0.5 lb ai) per acre per year. • DO NOT make more than 2 application per acre per year when using reduced application rates. • Retreatment Interval: 10 weeks 		

Key Weeds Controlled: LIBERTY OXYFLUORFEN 4L provides preemergence and postemergence control of the following weeds on fallow beds:¹

Buttercup, Smallflower Cheeseweed (Malva) Eveningprimrose, Cutleaf ² Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Geranium, Carolina Groundcherry, Cutleaf Groundsel, Common Henbit Ladysthumb Minerslettuce	Mustard Species Nettle, Burning Oxalis Pigweed, Red Root Purslane, Common Redmaids Rocket, London Shepherdspurse Sida, Prickly Sowthistle, Annual Velvetleaf (Wild Cotton)
<p>¹ Thorough spray coverage is essential to maximize the postemergence activity of this product. For postemergence control when applied by air, a tank mixture of this product with either glyphosate or paraquat is advised.</p> <p>² Requires maximum rate and/or multiple applications for effective control.</p>	

**FALLOW-BED USE PRIOR TO TRANSPLANTING PEPPERS OR
 STRAWBERRIES GROWN IN PLASTIC CULTURE
 (For Use Only in California)**

LIBERTY OXYFLUORFEN 4L may be applied broadcast or banded as a fallow bed application to pre-formed beds prior to transplanting peppers or strawberries grown in plastic culture. The LIBERTY OXYFLUORFEN 4L use rate is up to 1 pint per broadcast acre. It is advised that soil moisture be used to activate LIBERTY OXYFLUORFEN 4L soon after application. This can be done by sprinkler irrigation with approximately 1/2 inch of sprinkler irrigation and then applying the plastic any time during the 30-day treatment to planting interval. Or, if there is adequate existing soil moisture, apply plastic to the beds as soon as possible after application and allow the moisture which condenses and accumulates beneath the plastic to thoroughly wet the treated soil.

Mechanical incorporation of the fallow-bed treatment prior to laying plastic is not required. Not disturbing the soil may allow for extended weed control. Not incorporating increases the potential for crop injury, especially under wet conditions. Therefore, the treatment must be incorporated if the risk of crop injury is not acceptable. The minimum treatment to planting interval is 30 days.

FALLOW BEDS IN PLASTIC CULTURE PRIOR TO TRANSPLANT
(For Use Only in Florida, Georgia, North Carolina, South Carolina and Virginia)

LIBERTY OXYFLUORFEN 4L is effective as a preemergence broadcast or banded treatment to pre-formed beds as a fallow bed application prior to planting of peppers, strawberries or tomatoes grown in plastic culture. Plastic may be put down anytime during the 30-day treatment-planting interval. Incorporation of the fallow-bed treatment prior to laying plastic is not required and may allow extended weed control. However, not incorporating increases the potential for crop injury, especially under wet conditions. Therefore, the treatment must be incorporated if the risk of crop injury is not acceptable. Follow the minimum treatment-planting intervals outlined below.

Minimum Treatment-to-Planting Interval:

Transplanted Crops	LIBERTY OXYFLUORFEN 4L Use Rate	
	Up to 0.5 pt/acre	Up to 1 pt/acre
Pepper	30 days	30 days
Strawberries	30 days	30 days
Tomato	30 days	30 days

Partial List of Weeds Controlled: Pigweed, Ragweed, Nightshade, Florida pusley, Common purslane, Carolina geranium, Cutleaf evening primrose¹.

¹Requires maximum rate and/or multiple applications for effective control.

FALLOW BEDS TO BE PLANTED TO CORN
(For Use Only in Arkansas, Louisiana, and Mississippi)

LIBERTY OXYFLUORFEN 4L alone or in tank mix combination with glyphosate or paraquat is effective for the control of winter annual broadleaf weeds in fallow beds to be planted to corn. **DO NOT** apply this product within 7 days prior to planting. Once a fallow bed application is made, the soil surface must be left undisturbed for the period of time in which weed control is desired. If a fallow bed treatment is applied thirty or more days before planting corn and at least three significant rainfalls (0.25 inch or greater) have occurred following application, corn can be planted directly into the stale seedbed. Otherwise, the fallow bed treatment must be thoroughly incorporated into the soil to a depth of two inches or more prior to planting.

Exercise extreme care to avoid herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result.

Weeds Controlled: LIBERTY OXYFLUORFEN 4L provides preemergence and postemergence control of the following weeds when used at specified dosages and weed stage.¹

Buttercup, Smallflower Cheeseweed (Malva) Eveningprimrose, Cutleaf ² Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Geranium, Carolina Groundcherry, Cutleaf	Groundsel, Common Henbit Ladysthumb Minerslettuce Mustard Species Nettle, Burning Oxalis Pigweed, Redroot	Purslane, Common Redmaids Rocket, London Shepherdspurse Sida, Prickly Sowthistle, Annual Velvetleaf (Wild Cotton)
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¹ Thorough spray coverage is essential for optimum postemergence activity of this product. For optimum postemergence control when applied by air, a tank mixture of this product with either glyphosate or paraquat is advised.

² Requires maximum rate for effective control.

Application Rates (LIBERTY OXYFLUORFEN 4L Used Alone)

LIBERTY OXYFLUORFEN 4L may be applied at 0.5 to 1 pint (0.25 to 0.5 lb ai) per broadcast acre. The lower rate (0.5 pint per acre) provides up to 4 weeks of preemergence control of susceptible weeds and

provide postemergence control of susceptible weeds (up to 4-leaf stage). The higher rate (1 pint per acre) provides preemergence control of susceptible weeds for up to 8 weeks and postemergence control of susceptible weeds (up to 6-leaf stage). Best preemergence control is achieved when irrigation or rainfall occurs within 3 or 4 weeks following application.

Tank Mixes with LIBERTY OXYFLUORFEN 4L

Important: Read and observe applicable use directions, precautions and limitation on the respective tank mix labels. In interpreting the labels of tank mix products, the most restrictive limitations must apply.

Application Rates: LIBERTY OXYFLUORFEN 4L can be tank mixed with either glyphosate or paraquat to obtain postemergence control of annual grass weeds, volunteer grains and broadleaf weeds. One-half to 1 pint (0.25 to 0.5 lb ai) of LIBERTY OXYFLUORFEN 4L may be tank mixed with labeled rates of either glyphosate or paraquat: Apply at the specified rates and growth stages for susceptible weed species and in a manner consistent with the tank mix product label.

For enhanced contact activity (burndown/suppression) of either glyphosate or paraquat, LIBERTY OXYFLUORFEN 4L at the rate of 1.75 to 3.5 fluid ounces (0.05 to 0.1 lb ai) per acre may be added to labeled rates of either glyphosate or paraquat. Apply at the specified rates and growth stages for susceptible weed species and in a manner consistent with the tank mix product label.

Method of Application

Ground Application

Apply LIBERTY OXYFLUORFEN 4L in a spray volume of 20 or more gallons per acre with ground equipment. Increase the spray volume, if necessary, to ensure thorough coverage of existing weeds.

Aerial Application

Apply this product using swirl jet or hollow cone nozzles and a spray pressure less than 40 psi to deliver a minimum spray volume of 5 gallons per acre. Make applications at a height of 6 to 10 feet above the soil surface. **DO NOT** place the nozzles on the spray booms any closer to the wing or rotor tips than 3/4 of the span; this will minimize the formation of spray or wing tip vortice roll. Nozzles must be spaced and positioned to produce a uniform spray pattern and to minimize or eliminate the formation of droplets 100 microns or less in diameter. Carefully follow aerial application requirements and advisory information in the Fallow Bed section of the product label for AX OXYFLUORFEN 2EC.

Fallow Bed - Specific Use Restrictions (Mississippi, Arkansas and Louisiana)

In addition to the following, also observe Use Restrictions listed at the beginning of this label.

- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
- **Chemigation: DO NOT** apply this product through any type of irrigation system,
- **DO NOT** apply within 7 days before planting of corn.
- **DO NOT** use corn plants from a treated field for green chop, ensilage, forage or fodder.
- This product is phytotoxic to plant foliage.
- **DO NOT** apply when weather conditions favor drift. This product is phytotoxic to plant foliage.-Avoid drift to all non-target areas.
- The use of any plants from a treated field for green chop, ensilage, forage or fodder or the feeding or grazing of animals on any treated area is prohibited.
- **Preharvest Interval (PHI):** 60 days
- **DO NOT** treat ditch banks or waterways with this product.

FALLOW BEDS TO BE PLANTED TO FIELD CORN (For Use Only in California)

LIBERTY OXYFLUORFEN 4L is effective as a preemergence and/or postemergence herbicide when used alone or in a tank mix combination with glyphosate, paraquat or other registered postemergence herbicides for the control of winter annual broadleaf weeds in fallow beds to be planted to field corn.

Before planting field corn, treated soil must be thoroughly mixed to a depth of at least 2.5 inches. Failure to achieve thorough soil mixing may lead to crop injury and/or stand loss. Weed control must not be expected after soil incorporation.

If a fallow bed treatment is applied sixty days or more prior to planting and at least three significant rainfalls (0.25 inch or greater) have occurred following application, corn can be planted directly into the stale seedbed. At least 0.25 inch of irrigation or rainfall is required to activate LIBERTY OXYFLUORFEN 4L and must occur within 3 to 4 weeks after application. If these conditions cannot be met, soil incorporation is required as directed above

Use a tank mix with glyphosate, paraquat or another registered postemergence herbicide if the treatment area contains dense weed populations, oversized weed seedlings, volunteer grains or annual grasses.

Exercise extreme care to avoid herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result.

LIBERTY OXYFLUORFEN 4L Used Alone: LIBERTY OXYFLUORFEN 4L may be applied at 0.5 to 1 pint (0.25 to 0.5 lb ai) per acre. The lower rate (0.5 pint per acre) provides up to four weeks of preemergence control of susceptible weeds and provide postemergence control of susceptible weeds up to four-leaf stage. The higher rate (1.0 pint per acre) provides preemergence control of susceptible weeds for up to eight weeks and postemergence control of susceptible weeds up to six leaf-stage.

Tank Mixes with LIBERTY OXYFLUORFEN 4L: When tank mixing, always read and follow all individual manufacturer's labels. In interpreting all labels for the tank mix, the most restrictive situations must apply. LIBERTY OXYFLUORFEN 4L can be tank mixed with glyphosate, paraquat or other registered postemergence herbicides for postemergence control of annual weed grasses, volunteer grains and broadleaf weeds. Tank mix 0.5 to 1 pint (0.25 to 0.5 lb ai) of this product with labeled rates of glyphosate, paraquat or other registered postemergence products. Apply at the specified rates and growth stages to susceptible weed species in a manner consistent with the respective labels.

Ground Application: LIBERTY OXYFLUORFEN 4L must be applied in a minimum of 20 gallons of water per acre. The volume of water used must be increased as the weeds become taller and more dense. Use a low pressure sprayer equipped with flat fan nozzles. Spray equipment must be calibrated carefully before each use.

Aerial application: LIBERTY OXYFLUORFEN 4L may be aerially applied for weed control on fallow beds. Follow requirements for aerial application in the PRODUCT INFORMATION section of the main product label.

Avoid Drift: When applying to fallow beds, extreme care must be exercised to prevent spray drift, which could result in damage to other crops or desirable vegetation.

Crop injury may be enhanced if newly seeded crops are under stress due to drought, flooding, excessive fertilizer or soil salts, low soil temperatures, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects or diseases.

Restrictions (California Only)

- Follow all applicable use directions, precautions, restrictions, and Worker Protection Standard requirements on the EPA registered label.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre, per year.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per application.
- **DO NOT** apply within 60 days prior to planting of field corn.
- Before planting field corn, treated soil must be thoroughly mixed to a depth of at least 2.5 inches.
- **Chemigation:** Except if specified elsewhere in this label, **DO NOT** apply this product through any type of irrigation system.

- **DO NOT** use on sweet corn.
- The use of any plants from a treated field for green chop, ensilage, forage or fodder or the feeding or grazing of animals on any treated area is prohibited.
- Application may be made in a minimum of 20 gallons of water per acre using ground equipment or 5 gallons per acre by air. Applications may be made alone or as a tank mix with other herbicides.

**GROUND OR AERIAL APPLICATION OF AX OXYFLUORFEN 2EC
ON FALLOW BEDS TO COTTON OR SOYBEANS**

Not for Use on Fallow Beds to be Planted to Soybeans in California

For Use in Alabama, Arkansas, Georgia, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia

LIBERTY OXYFLUORFEN 4L is effective as a preemergence and/or postemergence herbicide when used alone or in a tank mix combination with glyphosate or paraquat for the control of winter annual broadleaf weeds in fallow beds to be planted to either cotton or soybeans.

Weeds Suppressed by Preemergence Application: LIBERTY OXYFLUORFEN 4L may be applied at 0.5 to 1 pint (0.25 to 0.5 lb ai) per broadcast acre. LIBERTY OXYFLUORFEN 4L provides preemergence suppression of the following weeds when used at specified dosages and weed stage.

horseweed (maretail)
ryegrass, italian

Conyza canadensis
Lolium multiflorum

FALLOW LAND

(Only in Idaho, Oregon and Washington)

Used alone or in a tank mix combination with glyphosate, LIBERTY OXYFLUORFEN 4L provides preemergence and/or postemergence control of listed annual broadleaf weeds in a fallow land system. LIBERTY OXYFLUORFEN 4L may be used to reduce weed growth prior to the establishment of a dry soil mulch. Use is restricted to summer fallow on land that will be planted the following year to winter wheat, barley or oats.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.25 - 1 (0.125 – 0.5 lb ai)	LIBERTY OXYFLUORFEN 2EC Alone: Preemergence weed control occurs as seedling weeds come in contact with the soil-applied herbicide during emergence. Postemergence weed control is most effective when LIBERTY OXYFLUORFEN 2EC is applied to seedling weeds less than 4 inches in height. Apply LIBERTY OXYFLUORFEN 2EC in 15 or more gallons of water per acre and increase spray volume if weed growth is dense. Use an 80% active nonionic surfactant cleared for use on growing crops for optimum postemergence weed control.
Tank Mixing: For postemergence control of annual grass weeds, 0.25 - 1 pint (0.125 – 0.5 lb ai) per acre of LIBERTY OXYFLUORFEN 2EC may be tank mixed with labeled rates of glyphosate. Follow label instructions for Fallow and Reduced Tillage Systems for the glyphosate product. Refer to Mixing Directions section for Tank Mixing Precautions.		
Use Restrictions for Fallow Land: <ul style="list-style-type: none"> • DO NOT apply more than 1 pint (0.5 lb ai) per acre per application. • DO NOT apply more than 1 pint (0.5 lb ai) per acre per year. • DO NOT make more than 2 applications per acre per year when using reduced application rates. • Retreatment Interval: 10 weeks 		

Key Weeds Controlled: LIBERTY OXYFLUORFEN 2EC provides preemergence and postemergence control of the following weeds on fallow land:

Fiddleneck, Coast Henbit Lettuce, Prickly (China Lettuce) Mustard, Blue (Purple Mustard) Mustard, Tumble (Jim Hill Mustard)	Pigweed, Red Root Purslane, Common Shepherdspurse Sowthistle, Annual
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GARBANZO BEANS (CHICKPEA)
(For Use Only in Arizona and California)

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	0.5 (0.25 lb ai)	Apply after planting but prior to weed or crop emergence as a single broadcast application using a spray volume of 20 or more gallons of water per acre.
Precautions:		
<ul style="list-style-type: none"> Garbanzo beans are resistant to preemergence application of this product, however, under certain conditions, severe but temporary crop injury may occur. A heavy splashing rain shortly after crop emergence or wet soil conditions during early growth stages can cause leaf cupping, crinkling, stunting or defoliation of the garbanzo seedlings. Injury, when it occurs, it is usually limited to the first few leaves that develop after plants emerge from the soil. Delays in crop development and/or maturity may result, but Garbanzo beans do recover with little to no impact on yield. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> DO NOT apply more than 0.5 pint (0.25 lb ai) per acre per application. DO NOT apply more than 0.5 pint (0.25 lb ai) per acre per year. DO NOT make more than 1 application per acre per year. DO NOT use bean vines for livestock feed or hay. Preharvest Interval (PHI): 30 days 		

Key Weeds Controlled:

Preemergence	
Groundsel, common Mallow, little	Rocket, london Shepherdspurse

GARLIC

For optimum preemergence weed control, the soil surface must be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices which result in redistribution or disturbance of the soil surface or move untreated soil into treated areas will reduce weed control.

Direct-Seeded Garlic (Postemergence Application):		
Weed Control	Rate (per acre)	Specific Use Directions
Postemergence	1 – 2 fl oz (0.03 – 0.06 lb ai)	<p>Northeastern States: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Apply LIBERTY OXYFLUORFEN 4L at 1 to 2 fluid ounces (0.031-0.063 lb ai) per acre to direct seeded garlic that has at least 3 fully developed true leaves using ground equipment. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. Multiple treatments at 1 to 2 fluid ounces (0.031-0.063 lb ai) per acre may be applied up to a maximum of 1 pint (16 fluid ounces) (0.5 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing. Application to weeds at later than the 4-leaf growth stage may result in reduced weed</p>

		control.
Postemergence	0.25 – 0.5 pt (0.125 – 0.25 lb ai)	Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah and Washington: Apply LIBERTY OXYFLUORFEN 4L at 0.25 to 0.5 pint (0.125- 0.25 lb ai) per acre to direct seeded garlic that has at least 2 fully developed true leaves using ground equipment. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. Multiple treatments at 0.25 to 0.5 pint (0.125-0.25 lb ai) per acre may be applied up to a maximum of 1.25 pints (0.625 lb ai) per acre per year. For optimum postemergence weed control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing. Application to weeds at later than the 4-leaf growth stage may result in reduced weed control.
Postemergence	0.25 pt (0.125 lb ai)	All Other States: Apply LIBERTY OXYFLUORFEN 4L at 0.25 pint (0.125 lb ai) per acre to seeded garlic that has at least 2 fully-developed true leaves using ground equipment. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. Multiple treatments at 0.25 pint (0.125 lb ai) per acre may be applied up to a maximum of 1 pint (0.5 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing. Application to weeds at later than the 4-leaf growth stage may result in reduced weed control.

Direct-Seeded Garlic (California Only):		
Weed Control	Rate (per acre)	Specific Use Directions
Preemergence Postemergence	0.5 pt (0.25 lb ai)	<p>Application after planting but prior to garlic emergence: Apply LIBERTY OXYFLUORFEN 4L after planting, but prior to crop emergence, for preemergence control of listed broadleaf and grass weeds using ground, air or sprinkler irrigation chemigation). Aerial application: Apply in a minimum spray volume of 10 gallons per acre. Follow Aerial Application instructions and precautions in the Product Information section of this label.</p> <p>Postemergence directed application: Apply LIBERTY OXYFLUORFEN 4L as a directed spray to garlic that is at least 12 inches tall. Accurate, uniform placement of directed postemergence sprays is essential for effective weed control and to minimize injury to garlic. Use low-pressure sprays and a minimum spray volume of 20 gallons per acre. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. For optimum postemergence control, apply when</p>

		<p>susceptible weeds are in the 2-to 4-leaf stage and actively growing. Application at later than the 4-leaf growth stage may result in reduced weed control.</p> <p>Sprinkler irrigation (portable lateral or solid set) preemergence or postemergence: Apply LIBERTY OXYFLUORFEN 4L at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Apply after planting but prior to garlic emergence or postemergence when garlic is at least 12 inches tall. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.</p>
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Precautions:

- **Garlic Response to Preemergence Applications:** Following a preemergence application of this product, a chlorotic band around some of the leaves may be observed after the first irrigation (or rainfall) following garlic emergence.
- **Garlic Response to Post-direct Applications:** Post-direct applications may cause chlorotic leaf banding, necrotic lesions, or stunting of the garlic plants. Symptoms will be more severe if applications are made during cool, wet, overcast, or foggy weather. Garlic will typically outgrow these conditions. A delay in crop development, maturity, reduced yields, or quality may result.

Transplanted Garlic: Postemergence Application Immediately after Planting		
Weed Control	Rate (per acre)	Specific Use Directions
Preemergence Postemergence	up to 1 pt (0.5 lb ai)	All States Except Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont: Transplanted garlic is most resistant to a postemergence application immediately after transplanting. An application of up to 1 pint (0.5 lb ai) per acre may be made within two days after transplanting. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. If less than 1 pint (0.5 lb ai) per acre is applied, a second application can be made two weeks or more after transplanting. DO NOT exceed the maximum use rate of 1 pint (0.5 lb ai) per acre of per year as a result of multiple applications.
Preemergence Postemergence	1 – 2 fl oz (0.03 – 0.06 lb ai)	Northeastern States: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Multiple treatments at 1 to 2 fluid ounces (0.03 – 0.06 lb ai) per acre may be applied up to a maximum of 1 pint (16 fluid ounces) (0.5 lb ai) per acre per year. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area.

Key Weeds Controlled:

Canarygrass (Annual) Eveningprimrose, Cutleaf Groundsel, Common Mallow, Little (Malva)	Puncturevine Purslane, Common ¹ Rocket, London Sage, Lanceleaf
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Nightshade, Black Pigweed, Prostrate ¹ Pigweed, Red Root ¹	Shepherdspurse ¹ Sowthistle, Annual
¹ Key weeds controlled at specified rates in Northeastern States.	

Garlic - Crop-Specific Precaution (Postemergence Application):
 Postemergence applications of LIBERTY OXYFLUORFEN 2EC may cause chlorotic leaf banding, necrotic lesions, or stunting of the garlic plants. Symptoms may be more severe if garlic emerged under cool, wet, overcast, or foggy weather. These conditions are temporary and must not affect the vigor or development of garlic plants.

Garlic - Crop-Specific Restrictions (Applicable to All Methods of Application):

- In all states **except** Northeastern states **DO NOT** apply until direct seeded garlic plants have 2-fully developed true leaves. In the Northeastern states, **DO NOT** apply until direct seeded garlic plants have 3-fully developed true leaves. Application made prior to the specified growth stage may result in serious crop injury.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per application.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
- **DO NOT** make more than 2 application per acre per year when using reduced application rates.
- **Retreatment Interval:** 8 weeks
- **Preharvest Interval (PHI):** 60 days
- In direct-seeded garlic (except in California), **DO NOT** apply this product as a preemergence treatment.
- Use only on dry bulb garlic.
- **DO NOT** apply to garlic grown for seed.
- For weed control in Garlic, **DO NOT** mix this product with oils, surfactants, liquid fertilizers or pesticides except if specified on approved Liberty Crop Protection Supplemental Labeling.
- **DO NOT** apply to garlic plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects, nematodes or diseases.

**GRASSES GROWN FOR SEED (ESTABLISHED PERENNIAL)
 (For Use Only in Idaho, Oregon and Washington)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Late preemergence to Early postemergence Fine fescues (Chewings, creeping red, and hard types)	0.25 (0.125 lb ai)	Make a single application of LIBERTY OXYFLUORFEN 2EC at 0.25 pints (0.125 lb ai) per acre per year. The application must be applied before the weed seedlings to be controlled exceed the two-leaf growth stage (Use Period: September 1 to December 15).
Late preemergence to Early postemergence Kentucky bluegrass, tall fescue, orchardgrass, bentgrass, perennial ryegrass	0.25 – 0.75 (0.125 – 0.375 lb ai)	Apply as a broadcast application in a minimum spray volume of 20 gallons of water per acre. Use conventional ground spray equipment with flat fan spray nozzles at a minimum spray pressure of 30 psi. DO NOT exceed maximum spray pressure of 60 psi. Spray equipment must be calibrated prior to application. Select an application rate based on soil conditions, weed spectrum, weed stage of growth and/or desired period of residual weed control. The maximum rate of 0.75 pint of LIBERTY OXYFLUORFEN 2EC may be split, however, the initial application must be applied before the weed (or volunteer grass) seedlings to be controlled exceed the 2-leaf growth stage and no later than December 15. The final application must be completed prior to January 15. A maximum of 0.75 pints of LIBERTY OXYFLUORFEN 2EC (0.375 lb ai) per acre may be applied per year.

	<p>Early treatment is important for control of seedling grasses. Apply LIBERTY OXYFLUORFEN 2EC at the onset of grass seed germination during the initial fall rains or fall sprinkler irrigation (late preemergence). Application at the 1-leaf growth stage (early postemergence) may provide somewhat better control of volunteer crop seedlings than application at the 2-leaf stage. Ample soil moisture soon after application is required for optimum performance against seedling grasses.</p> <p>LIBERTY OXYFLUORFEN 2EC will not control established perennial grasses or seedlings of most annual and perennial grasses beyond the six-leaf stage of growth. Applications to seedling grass weeds between the 2- and 6-leaf stage may result in partial control, but vary with weed species. Single applications made to seedlings between the 2- and 6-leaf growth stages will cause injury and stunting, but re-growth will usually occur. If seedlings have not died within 3 to 4 weeks after treatment and healthy green regrowth is visible, a second application may be needed.</p> <p>Surfactant</p> <p>For improved control of emerged weed seedlings, an 80% active nonionic surfactant cleared for application to growing crops may be added at a rate of 0.12 to 0.5% spray volume (1 to 4 pints/100 gal).</p>
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Precautions:

Crop Resistance

The application of this product to established perennial grass will result in a chlorosis (yellowing) within two weeks after treatment. These symptoms may be present for up to three months following application. The application of this product may also result in a substantial reduction in vegetative growth of perennial grasses during the winter. Leaf chlorosis and reduction of vegetative growth is a typical and normal response, however, the seed yield from healthy, vigorous perennial grasses has not been affected by fall application of this product. It is accepted by the grower that conditions under which seed yield may be reduced are not fully understood. Grazing may also magnify crop injury and reduce the seed yield.

Crop resistance to this product can be improved by limiting the amount of leaf tissue present on established perennial grasses at time of application by such methods as propane flaming, intensive mechanical clipping (crew-cutting), or livestock grazing prior to application.

Tank mixtures and/or sequential applications of this product with other herbicide products registered for use on grasses grown for seed may result in increased injury or stand loss. If a tank mixture is applied, applications must be made only to healthy, vigorous stands of perennial grasses. The decision to apply a tank mixture containing LIBERTY OXYFLUORFEN 2EC is at the sole discretion of the grower and at the grower's risk.

Crop-Specific Restrictions:

- **Chemigation: DO NOT** apply this product through any type of irrigation system.
- This product must be applied using ground equipment only.
- **DO NOT** apply more than 0.75 pints (0.375 lb ai) per acre per application.
- **DO NOT** apply more than 0.75 pints (0.375 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per acre per year when using reduced application rates.
- **DO NOT** make more than 1 application per year to fine fescues.
- **Preharvest Interval (PHI): Oregon** 150 days; **Idaho and Washington** 365 days
- **DO NOT** graze fields that have been treated with this product within 150 days of treatment in

Oregon or within 365 days of treatment in Idaho and Washington as illegal residues may be present in the vegetative foliage.

Weeds Suppressed and/or Controlled

LIBERTY OXYFLUORFEN 2EC will control or suppress the following weeds and volunteer crops when applied between the onset of germination and the two-leaf seedling growth stage:

Common Name	Scientific Name
Bentgrass	<i>Agrostis</i> spp.
Bluegrass, Annual	<i>Poa annua</i>
Bluegrass, Kentucky	<i>Poa pratensis</i>
Bluegrass, Roughstalk	<i>Poa trivialis</i>
Brome, California (mountain) ¹	<i>Bromus carinatus</i>
Fescue, Fine (creeping red and Chewings)	<i>Festuca rubra</i>
Fescue, Hard	<i>Festuca longifolia</i>
Fescue, Rattail	<i>Vulpia myuros</i>
Fescue, Tall	<i>Festuca arundinacea</i>
Orchardgrass	<i>Dactylis glomerata</i>
Rvegrass, Italian	<i>Lolium multiflorum</i>
Ryegrass, Perennial ¹	<i>Lolium perenne</i>

¹These species are suppressed but not fully controlled by this product.

**GRASSES GROWN FOR SEED
(Fall Seeded New Plantings of Perennial Ryegrass and Tall Fescue)
(For Use Only in Oregon)**

Weed Control	Rate (fl oz/acre)	Specific Use Directions
Early postemergence	1 – 1.5 (0.03 – 0.05 lb ai)	Use LIBERTY OXYFLUORFEN 2EC for early postemergence suppression/control of various annual broadleaf weed seedlings in fall seeded perennial ryegrass or tall fescue that has at least 1 to 2 tillers. Applications to seedling plants that have not yet tillered, may result in severe crop injury or stand loss (plant death). Apply a single application of LIBERTY OXYFLUORFEN 2EC either alone or in a tank mix with Ethofumesate. Some temporary crop injury may occur but is typically only a transient effect and must not adversely impact yield. Control from the LIBERTY OXYFLUORFEN 2EC is primarily directed at emerged seedling broadleaf weeds including speedwell and groundsel, but control or suppression of other species is possible if tank mixed with Ethofumesate. Apply as a broadcast application in a minimum spray volume of 20 gallons of water per acre. Use conventional ground spray equipment with flat fan spray nozzles at the manufacturer's specified spray pressure. Calibrate spray equipment before each use. Use of Surfactant: An 80 percent active nonionic surfactant cleared for application to growing crops may be added at a rate of 0.12 to 0.5 percent spray volume for improved control of emerged seedlings.

Precautions:

- **Crop Resistance.** The application of this product to fall seeded perennial ryegrass and tall fescue (that have at least 1 to 2 tillers) will result in chlorosis (yellowing) of the foliage within two weeks after treatment. Some symptoms may be present for up to three months following application. The

use of this product may also result in a substantial reduction in vegetative growth by perennial grasses during the winter. Leaf chlorosis and reduction of vegetative growth is a typical and normal response and seed yield of healthy, vigorous perennial grasses is typically not affected by fall application of this product. It is accepted by the grower that conditions under which seed yield may be reduced are not fully understood and that a reduction in seed yield may occur.

- Overlaps (2X applications) will cause significant crop injury but must not result in excessive stand losses if the crop plants are at least 1 to 2 tillers when the applications are made.
- Tank mixtures of LIBERTY OXYFLUORFEN 2EC with Ethofumesate may result in enhanced crop injury. If a tank mixture is to be applied, applications must be made only to healthy, vigorous stands of perennial grasses. The decision to apply a tank mixture containing LIBERTY OXYFLUORFEN 2EC is at the sole discretion of the grower and at the grower's risk.

Crop-Specific Restrictions:

- **DO NOT** apply to newly planted stands that are under stress from any cause as there is an enhanced opportunity for crop injury to occur.
- **Chemigation: DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply more than 1.5 fluid ounces (0.05 lb ai) per acre per application.
- **DO NOT** apply more than 1.5 fluid ounces (0.05 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per year when using reduced application rates.
- **DO NOT** graze livestock in treated fields within 150 days of application.
- **Preharvest Interval (PHI):** 150 days
- This product must be applied only by ground application equipment.
- **DO NOT** graze fields that have been treated with this product as illegal residues may be present in the vegetative forage.

Weeds Suppressed and/or Controlled: LIBERTY OXYFLUORFEN 2EC will provide control or suppression of the following weeds and volunteer crops when applied between the onset of germination and the two-leaf seedling growth stage:

Common Name	Scientific Name
Groundsel, Common	<i>Senecio vulgaris</i>
Speedwell	<i>Veronica</i> spp.

**GUAVA (BEARING AND NON-BEARING)
(For Use Only in Hawaii)**

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	2.5 – 4 (1.25 – 2.0 lb ai)	<p>Preemergence or Postemergence: In established guava plantings, apply preemergence or postemergence to weeds. Increase the spray volume to ensure adequate coverage in high densities of emerged weeds or heavy trash. Minimize contact with guava plants by directing the spray to the soil surface. Spray shields are suggested to minimize spray contact in young plantings.</p> <p>For broader spectrum postemergence control of grass and broadleaf weeds, LIBERTY OXYFLUORFEN 4L may be applied in tank mix combination with paraquat or glyphosate.</p> <p>Follow applicable use directions, precautions and limitations on the labels of the respective tank mix products.</p>
Postemergence	1 – 4 (0.5 – 2.0 lb ai)	

Precautions:

- Prevent direct spray or drift from contacting green stems, fruit or foliage, as injury may result.
- Alone or in tank mix combination, this product must be applied to only healthy growing trees.

- Application of this product must be made only after new foliage growth has hardened off.
- Crop-Specific Restrictions:**
- **DO NOT** apply more than 4 pints of LIBERTY OXYFLUORFEN 4L (2.0 lb ai) per acre per application.
 - **DO NOT** apply more than 8 pints of LIBERTY OXYFLUORFEN 4L (4.0 lb ai) per acre per year.
 - **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
 - **Retreatment Interval:** 8 weeks
 - **Preharvest Interval (PHI):** 1 day

Key Weeds Controlled:

Preemergence	Postemergence
Ageratum Buttonweed Crotalaria Purslane, Common Spurge, Garden	Purslane, Common Spurge, Garden

HORSERADISH

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1 (0.5 lb ai)	Apply LIBERTY OXYFLUORFEN 4L after the horseradish roots have been planted but prior to emergence of new horseradish leaves. Emerged leaves that receive direct or indirect spray (drift) contact will be injured. If necessary, cultivate before application to destroy germinated weeds.

Crop-Specific Restrictions:

- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per crop.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
- **DO NOT** make more than 1 application per acre per year.
- **Preharvest Interval (PHI):** 60 days
- **DO NOT** apply this product to horseradish plantings that have been weakened or stressed due to unfavorable temperature conditions, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.

Key Weeds Controlled:

Lambsquarters, Common Pigweed, Redroot Purslane, Common	Sheperdspurse Smartweed, Pennsylvania
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JOJOBA

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 – 1.5 lb ai)	Initial application may be made when jojoba plants have reached a height of 6 inches or more. Use sufficient spray volume to ensure thorough coverage of dense weed growth. Sprays must be directed to the base of jojoba plants to avoid possible phytotoxicity to foliage. Spray shields are suggested for use in young plantings. Use higher rate in rate range for extended residual preemergence weed control. Make follow-up applications as necessary to maintain weed control. For early postemergence control of susceptible seedling weeds (less than 8 inches tall) apply

		LIBERTY OXYFLUORFEN 4L at the rate of 2 pints (1.0 lb ai) per acre. LIBERTY OXYFLUORFEN 4L may be applied at the rate of 3 pints (1.5 lb ai) per acre for postemergence control of weeds up to 12 inches tall. For optimum residual control, apply during the fall or winter months. Control may be unsatisfactory for weeds greater than 12 inches tall.
Precautions:		
<ul style="list-style-type: none"> • Avoid direct spray or drift contact with jojoba flowers or buds as severe injury may result, • Over-the-top applications may cause burning, crinkling or bronzing of jojoba foliage, particularly to the youngest leaves, flowers, or buds present at the time of application. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. • DO NOT apply more than 3 pints (1.5 lb ai) per acre per year. • DO NOT make more than 1 application per acre per year. • Preharvest Interval (PHI): 30 days. 		

Key Weeds Controlled:

Preemergence	Postemergence
Burclover Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Filaree, Whitestem Groundsel, Common Henbit Knotweed, Prostrate Lambsquarters, Common Lettuce, Prickly Mallow, Little (Malva, Cheeseweed) Pigweed, Red Root Purslane, Common Redmaids Rocket, London Shepherdspurse Sowthistle, Annual	Fiddleneck, Coast Filaree, Broadleaf ² Filaree, Redstem ² Filaree, Whitestem ² Groundsel, Common ¹ Henbit Mallow, Little (Malva, Cheeseweed) Minerslettuce Nettle, Burning Pigweed, Red Root ¹ Redmaids Shepherdspurse Sowthistle, Annual
¹ Highest rate may be required for acceptable postemergence control. ² This product at the 3-pint rate will provide control of filaree not exceeding the 4-inch stage. Applications to filaree beyond the 4-inch stage may result in partial control.	

MINT (SPEARMINT AND PEPPERMINT TOPS)

Mint (Spearmint and Peppermint) Grown on Mineral Soils		
Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 – 1.5 lb ai)	<p>Oregon and Washington (East of Cascades), California, Montana, Idaho, Nevada, South Dakota and Utah: Apply from December through March when mint is dormant. When used postemergence (to weeds), add an 80% active ingredient nonionic surfactant at the rate of one quart per 100 gallons of spray volume and apply before weeds exceed a height of 4 inches.</p> <p>Late winter applications will provide maximum activity</p>

		on summer weeds, but summer grass control may be inconsistent. For best results, fall-plowed fields must be harrowed to provide a smooth surface for application. In furrow-irrigated fields, corrugating must be done prior to application. Corrugating or harrowing will result in disturbance of treated soil or movement of untreated soil into treated areas, resulting in poor weed control.
Preemergence	1 – 1.5 (0.5 – 0.75 lb ai)	Peppermint (Western Oregon Willamette Valley): Apply LIBERTY OXYFLUORFEN 4L from November through February to dormant peppermint only. Treatments in January or February provide better residual preemergence control of annual broadleaf weeds. Full season weed control must not be expected from this treatment.
Precautions:		
<ul style="list-style-type: none"> Application must be made prior to emergence of new spring growth or severe crop injury may result. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> DO NOT apply to spearmint or peppermint weakened by disease, drought, flooding, excessive fertilizer, soil salts, previously applied pesticides, nematodes, insects, or winter injury, as severe injury may result. Apply this product only to healthy stands of spearmint and peppermint. In the Willamette valley, DO NOT apply this product to mint that has been plowed. DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. DO NOT apply more than 3 pints (1.5 lb ai) per acre per year. DO NOT make more than 1 application per acre per year. Preharvest Interval (PHI): 30 days. 		

Key Weeds Controlled:

Bedstraw, Catchweed Bluegrass, Annual ¹ Flixweed Groundsel, Common Lambsquarters, Common Lettuce, Prickly (China Lettuce) Mustard, Blue (Purple Mustard) Mustard, Tumble (Jim Hill Mustard) Nightshade, Hairy	Oats, Wild ¹ Orach, Red Pepperweed, Yellowflower Pigweed, Red Root Ryegrass, Italian ¹ Shepherdspurse Sowthistle, Annual Tansymustard Thistle, Russian
¹ Control of annual grasses is best obtained when this product is applied prior to emergence. Postemergence control of winter annual grasses is generally unsatisfactory if applications are made after the 1 to 2-leaf stage.	

Mint (Spearmint and Peppermint Tops) Grown on Muck Soils: For Use Only on Mint Grown in Indiana, Michigan, Montana, North Dakota, South Dakota, and Wisconsin

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 – 1.5 lb ai)	<p>Note: Use directions in this section apply only to spearmint and peppermint grown on muck soils (organic matter content of 20% or greater).</p> <p>When used postemergence (to weeds), add an 80% active ingredient nonionic surfactant at the rate of one quart per 100 gallons of spray volume and apply</p>

	before weeds exceed a height of 4 inches.
Precautions:	
<ul style="list-style-type: none"> • Application must be made prior to emergence of new spring growth or severe crop injury may result. 	
Crop-Specific Restrictions:	
<ul style="list-style-type: none"> • To avoid excessive crop injury, DO NOT apply within 4 days of planting (sprigging) spearmint or peppermint. • Apply LIBERTY OXYFLUORFEN 4L only to healthy spearmint or peppermint. DO NOT apply to spearmint or peppermint that has been weakened by disease, nematodes, soil insects, or winter injury, as severe injury may result. • DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. • DO NOT apply more than 3 pints (1.5 lb ai) per acre per year. • DO NOT make more than 1 application per acre per year. • Preharvest Interval (PHI): 180 days. 	

Key Weeds Controlled:

Knotweed, Prostrate
Pigweed, Redroot
Purslane, Common

NON-CROP USE

Non-Food-Producing, Non-Cultivated Agricultural or Non-Agricultural Areas, (including Highway and Utility Rights-of-Way, Roadways, Industrial Sites, Tank Farms, Storage Areas, Airports, Fencerows, and Farmsteads)

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	2.5 – 4 (1.25 – 2.0 lb ai)	<p>Preemergence: Use higher rate in rate range for longer residual control.</p> <p>Postemergence: Use the lower rate in the rate range for control of susceptible weeds in the early postemergence stage, less than 4 inches tall. Use the higher rate for weeds up to 12 inches tall. Application to weeds beyond the 4-inch stage may result in partial control.</p>
Postemergence	1 – 4 (0.5 – 2.0 lb ai)	
<p>Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. It is the pesticide user's responsibility to ensure that all products are registered for 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</p> <ul style="list-style-type: none"> • Preemergence: For broader-spectrum residual preemergence weed control, this product may be applied in tank mix combination with diuron or simazine. • Postemergence: For additional postemergence control of susceptible grass and broadleaf weeds, this product may be applied in tank mix combination with paraquat or glyphosate. 		
Site-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT feed or allow animals to graze on any areas treated with this product. • DO NOT apply more than 4 pints (2.0 lb ai) per acre per application. • DO NOT apply more than 8 pints (4.0 lb ai) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks 		

Key Weeds Controlled:

Preemergence	Postemergence
Burclover Cheeseweed (Malva)	Cheeseweed (Malva) Fiddleneck, Coast

Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Groundsel, Common Henbit Knotweed, Prostrate Lambsquarters, Common Lettuce, Prickly Pigweed, Red Root Purslane, Common Redmaids Rocket, London Shepherdspurse Sowthistle, Annual	Filaree, Broadleaf Filaree, Redstem Groundsel, Common Henbit Minerslettuce Nettle, Burning Pigweed, Red Root Purslane, Common Redmaids Shepherdspurse Sowthistle, Annual
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**In addition to the above weeds, LIBERTY OXYFLUORFEN 4L also controls the following weeds:
Mile-A-Minute**

(For use in Connecticut and Pennsylvania)

LIBERTY OXYFLUORFEN 4L herbicide is advised for postemergence and preemergence control of Mile-a-Minute. LIBERTY OXYFLUORFEN 4L herbicide is advised for postemergence control at 1 pint (0.5 lb ai) per broadcast acre. This rate is advised for the control in the early postemergence stage (up to 4-leaf stage) in height. If applied to seedlings greater than the 4 leaf stage, the degree of suppression/burn down of existing growth is dependent on thorough and complete spray coverage of the weed. For preemergence control, LIBERTY OXYFLUORFEN 4L herbicide is advised at 1 pint (0.5 lb ai) per broadcast acre.

For the greatest benefit of LIBERTY OXYFLUORFEN 4L herbicide for preemergence control, adequate coverage of the soil and vegetative trash is required. Control of escape Mile-a-Minute seedlings must be obtained through postemergence applications of LIBERTY OXYFLUORFEN 4L herbicide. **DO NOT** apply more than 1 pint (0.5 lb ai) of LIBERTY OXYFLUORFEN 4L herbicide per broadcast acre as a single application or more than 4 pints (1.0 lb. active) per broadcast acre per year as a result of multiple applications. It is advised that a 80% active nonionic surfactant be added to the spray mixture at a rate of 9.8 mls (2 teaspoons or 0.4 fluid ounces) per 1 gallon of spray.

LIBERTY OXYFLUORFEN 4L herbicide must be applied in a minimum of 40 gallons of water per acre. Best preemergence results are achieved when spray is applied to a relatively weed-free soil surface. The volume of water used must be increased as the weeds become taller and more dense. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment must be calibrated carefully before each use.

Weed Stage	Gallons of Water Per Acre
Early Postemergence (weeds up to 4-leaf stage)	40 or more
Postemergence (weeds up to 8-leaf stage)	100 or more
Preemergence	40 or more

Witchweed

(For Use Only in North Carolina and South Carolina)

LIBERTY OXYFLUORFEN 4L herbicide is advised for postemergence and preemergence control of witchweed (*Striga asiatica*). LIBERTY OXYFLUORFEN 4L herbicide is advised for postemergence control at 1 to 2 pints (0.5 to 1.0 lb ai) per broadcast acre. Higher rates must be used for the control of dense populations of witchweed or where large witchweed plants are present. It is advised that a 80% active nonionic surfactant be added to the spray mixture at a rate of 0.125% v/v (1 pint per 100 gallons of spray mix).

LIBERTY OXYFLUORFEN 4L herbicide must be applied to witchweed plants before blooms form, to prevent the production of viable seed. Apply in a minimum of 10 gallons of water per acre. The volume of water used must be increased as the weeds become taller and more dense. Use a low-pressure sprayer equipped with flat fan or whirl chamber nozzles. Spray equipment must be calibrated carefully before each use.

ONIONS (CALIFORNIA ONLY) FOR APPLICATIONS TO ONIONS AT FIRST TRUE LEAF STAGE.

For applications to onions at later growth stages, refer to the ONION section below.

Weed Control	Rate (oz/acre)	Specific Use Directions
Postemergence	4-6 (0.125 - 0.188 lb ai)	<p>LIBERTY OXYFLUORFEN 4L may be applied as a broadcast or directed spray for the postemergence suppression or control of susceptible broadleaf weed species in dry bulb onions. Apply LIBERTY OXYFLUORFEN 4L after all onions have at least one true leaf fully emerged, extended and developed. The second true leaf must be visible at the time of application. The cotyledon ("flag leaf") is not the first true leaf. Best weed control results are obtained when LIBERTY OXYFLUORFEN 4L is applied to young (1-4 leaf), actively growing weeds. DO NOT apply to onions grown for seed, except as specified on other labels.</p> <p>Application timing: Apply LIBERTY OXYFLUORFEN 4L after all onions have at least one true leaf fully emerged, extended and developed. The second true leaf must be visible at the time of application. The cotyledon ("flag leaf") is not the first true leaf.</p> <p>Additional applications may be made during later stages of crop development. The total amount of LIBERTY OXYFLUORFEN 4L applied must not exceed 16 fluid ounces (0.5 lb ai) per acre per crop. Oxyfluorfen also may be used for later applications. The total amount of oxyfluorfen applied must not exceed 0.5 lb ai per acre per crop.</p> <p>Ground Application: Apply with ground equipment in a spray volume of at least 20 gallons of water per acre. Higher spray volumes are advised for best results. Increase the spray volume to ensure complete and uniform coverage as weed height and density increases. Use a low-pressure sprayer operated at the manufacturer's specified pressure.</p> <p>Chemigation: Apply 4 fluidounces (0.125 lb ai) of product per acre, using a solid set or portable lateral sprinkler irrigation system. Follow all directions given in the CHEMIGATION INSTRUCTIONS section. Refer to AERIAL APPLICATION section for buffer zone requirements. For upwind and side borders, maintain a minimum buffer zone of 150 feet from any vegetable crop or fallow bed field which will be planted to a crop within the number of days specified in the USE ON FALLOW BEDS section.</p>

Precautions:

- **Crop Resistance:** Dry bulb onions are tolerant to postemergence applications of this product, but application may result in some crop injury. **DO NOT** apply this product if the risk of crop injury is considered unacceptable. When applied to dry bulb onions at the first true leaf stage, this product may cause spotting, twisting or stunting. Injury is more likely when cold conditions (<40° F) occur before or after treatment, or when extended cool or cloudy conditions reduce active plant growth. When injury occurs, it usually is limited to the treated leaves, with new leaves emerging undamaged. Delay in crop development and/or maturity, and yield reduction may result from treatment to dry bulb onions with this product under these conditions.

Onions – Crop-Specific Restrictions (California Only)

- Use this product only on dry bulb onions
- **DO NOT** apply this product to onions grown for seed, except as instructed in separate use directions.
- At the time of application, all onion plants must have at least one true leaf fully emerged, extended and developed. The second true leaf must be visible at the time of application. The cotyledon ("flag leaf") is not the first true leaf.
- **DO NOT** apply this product to dry bulb onions when air temperatures are below 40°F at any time during the seven day period before application, or if air temperatures are expected to be below 40°F during the seven day period after the planned application.
- **DO NOT** apply more than 6 fluid ounces (0.188 lb ai) per acre by ground per application.
- **DO NOT** apply more than 4 fluid ounces (0.125 lb ai) per acre by chemigation at the first true leaf stage of crop development.
- **DO NOT** apply more than 16 fluid ounces (0.5 lb ai) per year per year.
- If an oxyfluorfen containing product is used for later applications, the total amount of oxyfluorfen applied must not exceed 0.5 lb ai per acre per application.
- **DO NOT** apply this product with adjuvants, oils, surfactants, liquid fertilizers or pesticides.
- **Preharvest Interval (PHI):** 45 days
- **DO NOT** apply this product when weather conditions favor drift. Avoid LIBERTY OXYFLUORFEN 4L drift to all non-target areas. This product is phytotoxic to susceptible plant foliage.
- **DO NOT** apply this product if heavy rainfall is predicted to occur within 24 hours after the planned application.
- **DO NOT** apply this product to plants that are weakened or are under stress due to temperature, disease, fertilizer, soil, salts, nematodes, insects, pesticides, drought, excessive moisture, flooding, or soil crusting.
- **DO NOT** apply this product as a preemergence treatment to direct-seeded onions.
- Tank mixtures of this product with oils, surfactants, liquid fertilizers or other pesticides may be made but could result in enhanced crop response/injury and are the responsibility of the user.

ONIONS

For optimum preemergence weed control, the soil surface must be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices that result in redistribution or disturbance of the soil surface or move untreated soil into treated areas will reduce weed control.

Direct-Seeded Onions: Postemergence Application

Weed Control	Rate (per acre)	Specific Use Directions
Postemergence	1 – 2 fl oz (0.03 – 0.06 lb ai)	Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Apply LIBERTY OXYFLUORFEN 4L at 1 to 2 fluid ounces (0.03 – 0.06 lb ai) per acre to direct-seeded onions that have at least 3 fully-developed true leaves using ground equipment. Multiple treatments at 1 to 2 fluid ounces (0.03 – 0.06 lb ai) per acre may be applied up to a maximum of 1

		pint (16 fluid ounces) (0.5 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing.
Postemergence	0.25 – 0.5 pt (0.125 – 0.25 lb ai)	Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah and Washington: Apply LIBERTY OXYFLUORFEN 4L at 0.25 to 0.5 pint (0.125 – 0.25 lb ai) per acre to direct-seeded onions that have at least 2 fully-developed true leaves, using ground equipment. Multiple treatments at 0.25 to 0.5 pint (0.125 – 0.25 lb ai) per acre may be applied up to a maximum of 1.25 pints (0.625 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing. Sprinkler Irrigation (center pivot, portable lateral or solid set): Apply LIBERTY OXYFLUORFEN 4L at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.
Postemergence	0.25 pt (0.125 lb ai)	All other states: Apply LIBERTY OXYFLUORFEN 4L at 0.25 pint (0.125 lb ai) per acre to direct seeded onions that have at least 2 fully developed true leaves using ground equipment. Multiple treatments at 0.25 pint (0.125 lb ai) per acre may be applied up to a maximum of 1 pint (0.5 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing. Sprinkler Irrigation (center pivot, portable lateral or solid set): Apply LIBERTY OXYFLUORFEN 4L at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.

Transplanted Onions: Application Immediately before Planting		
Weed Control	Rate (per acre)	Specific Use Directions
Preemergence Postemergence	0.5 – 1 pt (0.25 – 0.5 lb ai)	Pre-transplant application (not for use in Northeastern states or Western states): LIBERTY OXYFLUORFEN 4L may be applied as a broadcast or band application after completion of tillage operations, but before transplanting of onion plants. Transplanting must be accomplished with a minimum of soil disturbance. For optimum weed control, soil surfaces must be left undisturbed after transplanting for the period for which weed control is desired. However, timely cultivation after weed emergence will assist in weed control. If less than 1 pint (0.5 lb ai) per acre was applied as a pre-transplant application, postemergence applications may be

		made as instructed for seeded onions. DO NOT exceed the maximum use rate of 1 pint (0.5 lb ai) per acre per year as a result of multiple applications.
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Transplanted Onions: Application Immediately after Planting		
Weed Control	Rate (per acre)	Specific Use Directions
Preemergence	up to 1 pt (0.5 lb ai)	All states except Northeastern states: Transplanted onions are most tolerant of a postemergence application immediately after transplanting. An application of up to 1 pint (0.5 lb ai) per acre may be made within two days after transplanting. If less than 1 pint (0.5 lb ai) per acre is applied, a second application can be made two weeks or more after transplanting. DO NOT exceed the maximum use rate of 1 pint (0.5 lb ai) per acre of LIBERTY OXYFLUORFEN 4L per year as a result of multiple applications.
Preemergence	1 – 2 fl oz (0.03 – 0.06 lb ai)	Northeastern states including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Multiple treatments at 1 to 3 fluid ounces (0.03-0.06 lb ai) per acre may be applied up to a maximum of 1 pint (16 fluid ounces) (0.5 lb ai) per acre per year.

Onions - Use Precautions (applicable to all areas and methods of application):
<ul style="list-style-type: none"> • This product can cause necrotic lesions, twisting, pigtailling or stunting of the onion plants. Injury will be more severe if applications are made immediately following or during cool, wet weather and/or if applications are made prior to the specified onion growth stage of the onion plants as specified in Specific Use Directions.

Onions - Crop-Specific Restrictions (applicable to all areas and methods of application):
<ul style="list-style-type: none"> • DO NOT apply to onion plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects, nematodes or diseases. • In all states except Northeastern states, DO NOT apply until direct-seeded onion plants have at least two fully-developed true leaves. In the Northeastern states, DO NOT apply until direct-seeded onion plants have at least three fully-developed true leaves. Application made prior to the specified growth stage may result in serious crop injury. • DO NOT apply more than 1 pint (0.5 lb ai) per acre per application. • DO NOT apply more than 1 pint (0.5 lb ai) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks • Preharvest Interval (PHI): 45 days • DO NOT apply this product as a preemergence treatment to direct-seeded onions. • Use only on dry bulb onions. • DO NOT apply to onions grown for seed, except as instructed in separate use directions. • Tank mixtures of this product with oils, surfactants, liquid fertilizers or other pesticides may be made but could result in enhanced crop response/injury and are the responsibility of the user.

Key Weeds Controlled:

Postemergence	
Canarygrass (Annual) Eveningprimrose, Cutleaf ^(A) Groundsel, Common Mallow, Little (Malva) Nightshade, Black Pigweed, Prostrate ^(B) Pigweed, Redroot ^(A,B)	Puncturevine Purslane, Common ^(A) Rocket, London Sage, Lanceleaf Shepherdspurse ^(B) Sowthistle, Annual
<p>^a Weeds controlled when applied as a pre-transplant application. In addition, this product at the rate of 0.5 to 1 pint per acre will provide control/suppression of carpetweed, Pennsylvania smartweed, galinsoga, common lambsquarters, and wild mustard. Applications of this product to muck soils may result in partial control or suppression of the weeds listed.</p> <p>^b Specific weeds controlled at specified rates for use in Northeastern states (see SPECIFIC USE DIRECTIONS section).</p>	

ONIONS GROWN FOR SEED

Weed Control	Rate (per acre)	Specific Use Directions
Preemergence	1 fl oz (0.03 lb ai)	Northeastern States including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Multiple treatments at 1 fluid ounce (0.03 lb ai) per acre may be applied up to a maximum of 1 pint (16 fluid ounces) (0.5 lb ai) per acre per year. Prior to initial treatment, seeded onions must have at least four (4) true leaves. Multiple treatments at the aforementioned rate may be applied.
Preemergence	up to 0.25 pt (0.125 lb ai)	All other States: Apply LIBERTY OXYFLUORFEN 4L at up to 0.25 pint (0.125 lb ai) per acre to seeded onions that have at least 3-true leaves. Multiple treatments at 0.25 pint (0.125 lb ai) per acre may be applied up to a maximum of 1 pint (0.5 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. Sprinkler Irrigation - Portable Lateral or Solid Set: Apply LIBERTY OXYFLUORFEN 4L at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.

Use Precautions:

- **Notice:** Some varieties or inbred lines of onions may be more susceptible to this product. Care must be taken to insure that the particular onion variety or line being grown is resistant to this product. It is suggested that all onion varieties or lines be tested in limited areas to ensure an adequate level of crop resistance prior to an application for postemergence weed control.
- This product can cause necrotic lesions, twisting, pigtailling or stunting of the onion plants. Injury will be more severe if applications are made immediately following or during cool, wet weather and/or if applications are made prior to the specified onion growth stage of the onion plants as specified in Specific Use Directions.

Crop-Specific Restrictions:

- In all states, **DO NOT** apply this product until the onions have reached the minimum leaf stage

specified. Application prior to the specified stage of development may result in serious injury.

- **DO NOT** apply to onion plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects or diseases.
- **DO NOT** apply more than 0.25 pints (0.125 lb ai) per acre per application.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per acre per year.
- **Retreatment Interval:** 8 weeks
- **Preharvest Interval (PHI):** 60 days
- For seeded onions, **DO NOT** apply this product with oils, surfactants, liquid fertilizers or other pesticides.

Key Weeds Controlled:

Postemergence	
Canarygrass (Annual) Eveningprimrose, Cutleaf Groundsel, Common Mallow, Little (Malva) Nightshade, Black Pigweed, Prostrate ¹ Pigweed, Red Root ¹	Puncturevine Purslane, Common ¹ Rocket, London Sage, Lanceleaf Shepherdspurse Sowthistle, Annual
¹ Specific weeds controlled at specified rates for use in Northeastern states (see SPECIFIC USE DIRECTIONS section).	

**PAPAYA
(For Use Only in Hawaii)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 (1.0 lb ai)	<p>The initial application must occur no sooner than 4 months after transplanting or 6 months after direct seeding, and after the papaya has reached a minimum height of 4 feet. Applications may be repeated at approximate 4-month intervals.</p> <p>Apply preemergence or postemergence to weeds. Increase the spray volume to assure adequate coverage of dense growth of emerged weeds. LIBERTY OXYFLUORFEN 4L must be applied as a directed spray to the orchard floor beneath the papaya plants. Accurate, uniform placement of LIBERTY OXYFLUORFEN 4L is essential for effective weed control and to minimize crop injury. LIBERTY OXYFLUORFEN 4L must be applied using rigid precision ground sprayer equipment.</p> <p>Postemergence applications may be made up to the 4 leaf stage of weed growth.</p>

Crop-Specific Restrictions:

- **DO NOT** use this product on papaya plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.
- **DO NOT** allow the herbicide solution, spray, drift or mist to contact green bark, stems, fruit or foliage as injury may result.
- **DO NOT** apply more than 2 pints (1.0 lb ai) per acre per application.
- **DO NOT** apply more than 6 pints (3.0 lb ai) per acre per year.
- **DO NOT** make more than 3 applications per acre per year.
- **Retreatment Interval:** 8 weeks

• Preharvest Interval (PHI): 1 day

Key Weeds Controlled:

Amaranth, Spiny Purslane, Common	Spurge, Garden
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**PEA, ORNAMENTAL SWEET, GROWN FOR SEED
(For Use Only in California)**

Ornamental sweet peas grown for seed are resistant to preemergence applications of LIBERTY OXYFLUORFEN 4L. However, under certain conditions, LIBERTY OXYFLUORFEN 4L can cause severe crop injury. Splashing rain or irrigation shortly after crop emergence or wet soil conditions during early growth stages can produce leaf cupping, crinkling, stunting, or defoliation of the ornamental sweet pea seedlings. When injury occurs, it is often limited to the first few leaves that develop shortly after plant emergence from the soil. Delays in crop development and/or maturity, and yield reduction may result.

DO NOT use LIBERTY OXYFLUORFEN 4L if the risk of crop injury is unacceptable. **DO NOT** use LIBERTY OXYFLUORFEN 4L on ornamental sweet pea plantings where seed lots are weakened or germinating seed are under stress due to temperature, disease, fertilizer-, soil, salts, nematodes, insects, pesticides, drought, excessive moisture, flooding, or soil crusting.

LIBERTY OXYFLUORFEN 4L must be applied at a rate of 0.25 – 0.5 pint (0.0125 - 0.25 lb ai) per acre as a preemergence application shortly after planting. Apply in a minimum of 20 gallons of water per acre, using a low pressure sprayer equipped with flat fan or hollow cone nozzles. **DO NOT** exceed 40 psi.

LIBERTY OXYFLUORFEN 4L provides preemergence suppression of the following weeds when used at specified rates:

Cheeseweed (Malva)	<i>Malva parviflora</i>
Groundsel, Common	<i>Senecio vulgaris</i>
Rocket, London	<i>Sisymbrium irio</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>

For optimum preemergence weed control, the soil surface must be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices which result in redistribution or disturbance of the soil surface or move untreated soil into treated areas will reduce weed control.

Use Restrictions:

- **DO NOT** apply more than 0.5 pint (0.25 lb ai) per acre per application.
- **DO NOT** apply more than 0.5 pint (0.25 lb ai) per acre per year.
- **DO NOT** make more than 1 application per year when using reduced application rates.
- **DO NOT** use plants treated with this product for feed or forage.
- **DO NOT** feed or allow animals to graze on any areas treated with this product.
- Apply only with ground application equipment.

**ROSES: FIELD-GROWN, ESTABLISHED PLANTINGS
(For Distribution and Use Only in the State of California)**

LIBERTY OXYFLUORFEN 2EC may be used as a post-directed application for control of certain broadleaf weeds in well-established rose plantings after bud grafted canes are at least 18 inches in length.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1 – 2 (0.5 – 1.0 lb ai)	For optimum preemergence weed control, the soil surface must be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices which result in redistribution or

		disturbance of the soil surface or move untreated soil into treated areas will reduce weed control.
Postemergence	1 – 2 (0.5 – 1.0 lb ai)	The lower rate is specified for the control of susceptible seedling weeds in the early postemergence stage, before the 4-leaf growth stage. The higher rate is advised for weeds at the 4-leaf growth stage. The addition of a labeled rate of a herbicide adjuvant may assist in spray coverage and postemergence activity. Applications to weeds beyond the 4-leaf growth stage may result in partial control

Precautions:

- Apply in 25 to 40 gallons of water per broadcast acre. Use a low-pressure sprayer with nozzles directed at the base of rose plants. Use spray shields to avoid spray contact with rose foliage. To minimize spray drift, use the lowest spray pressure suitable for the application equipment.
- This product must be applied only to roses with canes that are 18 inches or longer. Applications to rose plants with canes less than 18 inches in length may result in severe crop injury. Spray contact with foliage may cause severe crop injury and must be avoided. Leaves that are contacted by the spray will exhibit necrotic spotting and may drop from plant. Splashing rain or irrigation water or excessive soil moisture after application may result in leaf cupping, crinkling, stunting or defoliation.
- This product is phytotoxic to plant foliage. Avoid drift to nontarget areas. **DO NOT** apply when weather conditions favor drift.
- When applied as directed, field-grown roses are resistant to this product, but this has not been evaluated on all varieties, biotypes and cultivars of roses under all possible growing conditions. The user must exercise caution with this product. Until familiar with results under current growing conditions, limit application of this product to a few plants in a small area to-determine plant tolerance and potential for injury before initiating large-scale applications.
- Tank mixtures of this product with oils, liquid fertilizers or other pesticides may increase the potential for crop injury and are the responsibility of the user.

Use Restrictions:

- **DO NOT** apply more than 2 pints (1.0 lb ai) per acre per application
- **DO NOT** apply more than 4 pints (2.0 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per acre per year
- **Retreatment Interval:** 8 weeks of previous application
- **DO NOT** apply this product in enclosed greenhouse or lathhouse structures.
- **DO NOT** feed or graze animals on areas treated with this product.
- This product is phytotoxic to plant foliage. **DO NOT** apply when weather conditions favor drift to non-target areas.
- **DO NOT** apply this product to rose plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.
- **DO NOT** apply this product to roses through any type of irrigation system.

Weeds Controlled Pre-emergence:

Little Mallow (Cheeseweed)	<i>Malva parviflora</i>
Field Bindweed (Annual Morningglory)	<i>Convolvulus arvensis</i>
Morningglory, Ivyleaf	<i>Ipomoea hederacea</i>
Nightshade, Black	<i>Solanum nigrum</i>
Nightshade, Hairy	<i>Solanum physalifolium</i>
Nodding Beggarticks	<i>Bidens</i> spp
Redroot Pigweed	<i>Amaranthus retroflexus</i>

Weeds Controlled Postemergence:

Little Mallow (Cheeseweed)	<i>Malva parviflora</i>
Field Bindweed (Annual Morningglory)	<i>Convolvulus arvensis</i>

Morningglory, Ivyleaf	<i>Ipomoea hederacea</i>
Nightshade, Black	<i>Solanum nigrum</i>
Nightshade, Hairy	<i>Solanum physalifolium</i>
Redroot Pigweed	<i>Amaranthus retroflexus</i>

**SOYBEANS[*]
[Not for Use in California]**

Soybeans - Early Preplant Application in Conservation Tillage Systems		
Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	0.75 – 1.5 (0.375 – 0.75 lb ai)	<p>Early Preplant Application: Surface apply LIBERTY OXYFLUORFEN 4L to the stale seedbed approximately 14 days before planting conservation tillage soybeans for postemergence and preemergence residual broadleaf control. Use a spray volume of 20 or more gallons per acre and increase the spray volume if growth of existing weeds is dense. LIBERTY OXYFLUORFEN 4L at 1 to 1.5 pints (0.5 – 0.75 lb ai) provides early season suppression of annual grasses, but must not be relied upon as a basic grass herbicide. A planned program utilizing herbicides registered for early preplant, preemergence or postemergence grass control in soybeans is specified.</p> <p>Use of ridge or slot planter or a similar planting implement that causes minimal soil disturbance is specified. Movement or redistribution of surface soil will reduce herbicidal effectiveness.</p>

Soybeans: No-Till (Double-Crop)		
Application Timing for Target Weeds	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.25 – 1 (0.125 – 0.5 lb ai)	<p>Preemergence Application to Soybeans: Applied preemergence, LIBERTY OXYFLUORFEN 4L provides postemergence and residual preemergence control of susceptible broadleaf weeds. Apply LIBERTY OXYFLUORFEN 4L within one day after planting. Later applications may result in severe crop injury. Apply in a minimum spray volume of 20 gallons per acre and increase spray volume if growth of existing weeds is dense.</p>
<p>Tank Mixing: For enhanced postemergence control of existing grass and broadleaf weeds, LIBERTY OXYFLUORFEN 4L may be tank mixed with paraquat or glyphosate. For extended residual control of annual grasses no-till soybeans, this product may also be tank mixed with a residual grass herbicide.</p>		
Postemergence	0.5 (0.25 lb ai)	<p>Postemergence Directed Application: LIBERTY OXYFLUORFEN 4L may be applied as a post-directed application. Optimum control is achieved when LIBERTY OXYFLUORFEN 4L is applied to seedling weeds not exceeding 4 true leaves (not counting cotyledon leaves) and actively growing. Use an 80% nonionic surfactant cleared for application to growing crops at the rate of 2 pints (1.0 lb ai) per 100 gallons of spray whenever postemergence weed control is desired. For postemergence application,</p>

		Soybeans must be a minimum 8 inches tall. Use a minimum of 2 flat fan nozzles per row. Use branch lifters or shields to prevent excessive spray contact to the soybean plants. DO NOT use hollow cone nozzles.
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Soybeans: Grown Under Conventional Tillage Systems

Application Timing for Target Weeds	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.5 – 0.75 (0.25 – 0.375 lb ai)	Preemergence Application to Soybeans: LIBERTY OXYFLUORFEN 4L provides preemergence control of susceptible broadleaf weeds. Apply LIBERTY OXYFLUORFEN 4L within one day after planting. Later applications may result in severe crop injury. Apply in a minimum spray volume of 20 gallons per acre and increase spray volume if growth of existing weeds is dense. The 0.75 pint (0.375 lb ai) per acre rate will assist in early season annual grass control but must not be relied upon as a basic grass herbicide. LIBERTY OXYFLUORFEN 4L may also be applied as a preemergence application following a preplant incorporated grass herbicide treatment.

Preemergence Tank Mixes (To Control Additional Grass and Broadleaf Weeds): Apply preemergence tank mixes of LIBERTY OXYFLUORFEN 4L within one day after planting. Later applications may result in severe crop injury.

- This product at 0.3 to 0.75 pints (0.15 – 0.375 lb ai) per acre may be applied preemergence to soybeans in tank mix with Metolachlor or S-metolachlor. OXYFLUORFEN 4SC may be applied alone as a preemergence application following a preplant incorporated grass herbicide application or as a tank mix in a preemergence application with herbicides. Refer to the label of tank mix product for additional weeds controlled.
- This product at 0.3 to 0.4 (0.15 – 0.2 lb ai) pints per acre may be applied preemergence to soybeans in tank mix with clomazone. Refer to the product label for additional weeds controlled.

Postemergence	0.5 (0.25 lb ai)	Postemergence Directed Sprays: LIBERTY OXYFLUORFEN 4L may be applied as a post-directed application at 0.5 pint (0.25 lb ai) per acre. Optimum control is achieved when weeds not exceed 4 true leaves and are actively growing (DO NOT count cotyledon leaves). Use of an 80% nonionic surfactant cleared for application to growing crops at the rate of 2 pints (1.0 lb ai) per 100 gallons of spray is advised whenever postemergence weed control is desired. For postemergence application, Soybeans must be a minimum 8 inches tall. Use a minimum of 2 flat fan nozzles per row. Use branch lifters or shields to prevent excessive spray contact to the soybean plants. DO NOT use hollow cone nozzles.
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Postemergence Tank Mixes: For broader spectrum control of broadleaf weeds, LIBERTY OXYFLUORFEN 4L may be applied in tank mix with 2,4-DB. Use 0.5 pint (0.25 lb ai) of LIBERTY OXYFLUORFEN 4L with specified rate of 2,4-DB per acre. Refer to label of tank mix product for additional weeds controlled.

Precautions (All Methods and Timings to Soybeans):

- Soybeans are resistant to preemergence and post-directed applications of LIBERTY OXYFLUORFEN 4L at specified rates, however, under certain conditions injury may occur. Heavy splashing rain shortly after crop emergence or cold, wet soil conditions during early growth stages

can cause leaf cupping and crinkling. When injury occurs, it is limited to the first few leaves that develop after crop emergence. Soybeans recover from this injury and yields are not adversely affected. Soybeans accidentally sprayed during a post-directed application will exhibit necrotic spotting and injury to the soybean plant. Exercise care to avoid spray contact with the soybean leaves.

Crop-Specific Restrictions:

- **Tank Mixing:** It is the pesticide user’s responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
- **DO NOT** apply more than 1.5 pints (0.75 lb ai) per acre per application.
- **DO NOT** apply more than 1 pint (0.5 lbs ai) per acre per year as a result of preemergence application in no-till (double-crop) or conventional till soybeans, or postdirected in conventional till soybeans.
- If early preplant application is made, apply more than 1.5 pints (0.75 lb ai) per acre per year.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per year.
- **Retreatment Interval:** 8 weeks
- **DO NOT** apply a post-directed application of this product to soybeans after the initial appearance of blooms.

Key Weeds Controlled:

Preemergence	Postemergence
Groundcherry, Cutleaf ¹	Cocklebur, Common
Jimsonweed	Croton, Tropic
Lambsquarters, Common	Groundcherry, Cutleaf
Nightshade, American Black ¹	Groundcherry, Wright
Nightshade, Black ¹	Jimsonweed
Pigweed, Red Root	Lambsquarters, Common
Poinsettia, Wild	Morningglory, Annual (Up To 6 Leaf)
Shepherdspurse	Mustard, Wild
Sida, Prickly (Teaweed)	Nightshade, American Black
Smartweed, Pennsylvania	Nightshade, Black
Sowthistle, Common ¹	Nightshade, Hairy
Velvetleaf	Pigweed, Red Root
	Poinsettia, Wild ¹
	Purslane, Common
	Sesbania, Hemp
	Shepherdspurse
	Sicklepod ²
	Sida, Prickly (Teaweed) ¹
	Smartweed, Pennsylvania
	Velvetleaf

¹ Multiple applications may be required for acceptable control.

² Post-direct applications of this product will kill or suppress seedlings not exceeding the one true leaf stage.

TARO
(For Use Only in Hawaii)

For use only in dryland taro grown in Hawaii. Dryland taro is defined as taro grown without irrigation, or by using irrigation practices that **DO NOT** result in run-off, irrigation return flow, or other loss of irrigation water from the production area. If irrigation is used, the water applied shall not exceed the field capacity of the soil.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1 (0.5 lb ai)	Preemergence to Taro and Weeds: A single application of LIBERTY OXYFLUORFEN 4L at the rate of 1 pint (0.5 lb ai) per acre may be applied within 1 week after transplanting but prior to emergence of taro plants.
Postemergence	0.5 (0.25 lb ai)	Postemergence to Taro and Weeds: LIBERTY OXYFLUORFEN 4L may be applied as a post-directed or band application at the rate of 0.5 pint (0.25 lb ai) per acre. Effective control of succulent weed seedlings in the 2-to 3-leaf stage can usually be obtained. Applications to weeds beyond the 3-leaf stage may result in partial control.

Precautions:

- Accurate, uniform placement of this product is essential for effective weed control and to minimize crop injury. Taro foliage receiving accidental spray or drift will be injured. This product must be applied using rigid precision ground sprayer equipment.
- Occasionally, after the use of this product, spotting, crinkling or flecking may appear on the leaves of the taro. Leaves that receive direct or indirect (drift) spray contact will be injured.

Crop-Specific Restrictions:

- **DO NOT** use this product on taro plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per broadcast acre per preemergence application.
- **DO NOT** apply more than 0.5 pint (0.25 lb ai) per acre in a single post-direct spray or more than 1 pint (0.5 lb ai) per acre per year as a result of multiple post-directed applications.
- **DO NOT** apply more than 2 pints (1.0 lb ai) per acre per year as a result of preemergence and post-direct applications.
- **DO NOT** make more than 2 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 10 weeks
- **Preharvest Interval (PHI):** 6 months of harvest of taro (corms, leaves).

Key Weeds Controlled:

Amaranth, Spiny
Purslane, Common
Spurge, Garden

TREE FRUIT / NUT / VINE CROPS (Dormant Application)

Pome Fruit Crop Group 11-10: Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these

Stone Fruit Crop Group 12-12: 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

Tree Nut Crop Group 14-12: 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

Miscellaneous: Avocado, Date, Feijoa, Fig, Grapes, Kiwi, Olives, Persimmon and Pomegranates

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence (broadcast application) (banded application)	2.5 – 3 (1.25 – 1.5 lb ai) 2.5 – 4 (1.25 – 2.0 lb ai)	Apply LIBERTY OXYFLUORFEN 4L a minimum of 20 gallons of water per acre. Use higher spray volumes to ensure thorough coverage in high densities of emerged weeds or heavy trash. Sprays must be directed to the soil and the base of dormant trees or vines. In California , LIBERTY OXYFLUORFEN 4L may be applied as an over-the-top or directed spray to dormant nonbearing grape plantings. The use of a low-pressure sprayer is suggested. DO NOT apply over-the-top to grape plantings that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, injury from previously applied pesticides, or injury due to insects, nematodes, or diseases, as severe crop injury may result.
Postemergence (broadcast application) (banded application)	1 – 3 (0.5 – 1.5 lb ai) 1 – 4 (0.5 – 2.0 lb ai)	Apply in a spray volume of 40 or more gallons per acre. For optimum control, apply when weeds are at the seedling stage of growth. The lower rate in the rate range (1 pint or 0.5 lb ai per acre) is specified for the control of susceptible seedling weeds in the early postemergence stage up to the 4-leaf stage. Higher rates (up to 3 pints or 1.5 lb ai per acre) may be used for weeds up to the 6-leaf stage. Applications to weeds beyond the 6-leaf stage may result in partial control.
<p>Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply. See labels of tank mix partners to determine suitability and use rates for various crops.</p> <ul style="list-style-type: none"> • Postemergence: For broader spectrum postemergence control of listed grass and broadleaf weeds, this product may be applied in tank mix with paraquat or glyphosate. These herbicides may also be added to preemergence tank mixes for enhanced control of existing weeds. • Preemergence: For broad-spectrum preemergence control of susceptible grass and broadleaf weeds in listed tree fruit, nut or vine plantings, this product may be applied in tank mix with diuron, napropamide, norflurazon, oryzalin, pronamide or simazine. 		
<p>Chemigation (All States): For dormant season application using sprinkler (low-volume (micro sprinkler), drip (trickle), and flood (basin) irrigation systems, apply LIBERTY OXYFLUORFEN 4L at the specified rate per acre. Follow applicable directions in the Chemigation section of this label when making applications using irrigation systems.</p>		
<p>Precautions:</p> <ul style="list-style-type: none"> • This product or any of the combinations listed on this label must be applied to only healthy growing trees or vines. • Avoid direct plant contact. Direct spray toward the base of tree or vines unless specific use directions allow over-the-top application. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • In all states, unless otherwise specified, DO NOT apply this product during the period between bud swell and completion of final harvest or when fruit/nuts are present. This product may be applied upon completion of final harvest. • In Arizona and California, this product may be applied during the period following completion of 		

final harvest up to February 15 (February 1st in the Coachella Valley, California). Applications made after these calendar dates, but prior to bud swell, may result in significant crop injury and are the responsibility of the user.

- **For banded applications, DO NOT** apply more than 4 pints (2.0 lb ai) per acre per year within the treated band.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per year on a broadcast basis.
- **DO NOT** apply more than 4 pints (2.0 lb ai) per acre per application.
- **DO NOT** make more than 3 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 2 weeks
- **DO NOT** apply to grapes or kiwi established less than 3 years unless vines are on a trellis wire a minimum of 3 feet above the soil surface.
- **DO NOT** apply to grapes or kiwi that are not staked or trellised unless vines are free standing.

Key Weeds Controlled (Arizona and California):

Preemergence	Postemergence
Burclover	Cheeseweed (Malva)
Cheeseweed (Malva)	Fiddleneck, Coast
Fiddleneck, Coast	Filaree, Broadleaf ¹
Filaree, Broadleaf	Filaree, Redstem ¹
Filaree, Redstem	Filaree, Whitestem ¹
Filaree, Whitestem	Groundsel, Common
Groundsel, Common	Henbit
Henbit	Minerslettuce
Knotweed, Prostrate	Nettle, Burning
Lambsquarters, Common	Pigweed, Redroot
Lettuce, Prickly	Redmaids
Pigweed, Redroot	Shepherdspurse
Purslane, Common	Sowthistle, Annual
Redmaids	
Rocket, London	
Shepherdspurse	
Sowthistle, Annual	

¹This product at the 6-pint rate will provide control of filaree not exceeding the 4-inch stage. Applications to filaree beyond the 4-inch stage may result in partial control.

Key Weeds Controlled (All Other States Except Arizona and California):

Preemergence	Postemergence
Camphorweed	Balsamapple
Cudweed, Narrowleaf	Cocklebur, Common
Eveningprimrose, Cutleaf ¹	Cudweed, Narrowleaf ²
Groundcherry, Cutleaf	Eveningprimrose, Cutleaf ¹
Jimsonweed	Groundcherry, Cutleaf
Lambsquarters, Common	Groundcherry, Wright
Nightshade, American Black	Jimsonweed
Nightshade, Black	Lambsquarters, Common
Pepperweed, Virginia	Morningglory, Annual
Pigweed, Red Root,	Nightshade, American Black
Poinsettia, Wild	Nightshade, Black
Sida, Prickly	Pepperweed, Virginia
Smartweed, Pennsylvania	Pigweed, Red Root
Sowthistle, Annual	Poinsettia, Wild
Spurge, Prostrate	Purslane, Common
Spurge, Spotted	Sesbania, Hemp
Velvetleaf	Shepherdspurse
	Sida, Prickly (Teaweed)

	Smartweed, Pennsylvania Sowthistle, Annual Velvetleaf
¹ Highest rate and/or multiple applications may be required for acceptable control.	
² Maximum 0.5-inch diameter.	

**APRICOTS, NECTRARINES, OLIVES, PEACHES, PLUMS AND PRUNES
(Non-Dormant Application)
(For Use Only in California)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Postemergence	0.25 – 0.5 (0.125 - 0.25 lb ai)	<p>LIBERTY OXYFLUORFEN 4L for postemergence suppression of the target weeds at 0.25 to 0.5 pint (0.125 to 0.25 lbs ai) per broadcast acre when applied to susceptible weed seedlings less than 4 inches in height. Repeat applications may be required.</p> <p>DO NOT exceed 3 pints (1.5 lbs ai) of LIBERTY OXYFLUORFEN 4L during the nondormant stage of apricots, nectarines, olives, peaches, plums and prunes.</p> <p>For a broader spectrum of grass weeds and broad leaf weeds control in the tree row middles, a tank mixture of LIBERTY OXYFLUORFEN 4L with either paraquat or glyphosate (Glyphogan) can be used. Read and follow the labeling of either the paraquat or glyphosate (Glyphogan) pesticide product which is to be tank mixed with LIBERTY OXYFLUORFEN 4L.</p> <p>Direct spray toward the base of the tree. Avoid direct herbicide contact with foliage and fruit</p>

Apricots, Nectarines, Olives, Peaches, Plums and Prunes in California

Nondormant Application

Specific Use Restrictions

- Read and observe all label directions before using. When tank mixing, always read all individual manufacturer labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.
- When applied as a non-dormant treatment, this product can only be applied to apricots, peaches, nectarines, plums and prunes after May 1. This product can only be applied as a non-dormant treatment to olives after bloom.
- **Preharvest Interval (PHI):** 14 days of harvest of fruit.
- **DO NOT** apply more than 3 pints (1.5 lbs ai) per broadcast acre per year during the non-dormant season.
- **DO NOT** apply more than 0.5 pints (0.25 lb ai) per acre per application postemergence.
- **DO NOT** make more than 4 applications per year when using reduced application rates.
- Apply this product only to healthy trees.

Product Information

LIBERTY OXYFLUORFEN 4L provides effective postemergence control of cheeseweed and other young broad leaf weed seedlings listed below in non-dormant apricots, nectarines, olives, peaches, plums and prunes. For enhanced post-emergence activity against these target weeds as well as other weed species, tank mixtures of LIBERTY OXYFLUORFEN 4L with either paraquat or glyphosate (can be used to increase the spectrum of weed control by either of these tank mix partners. Compatibility of each mixture

must be established before tank mixing and application must be applied by ground equipment. Follow all precautions and restrictions on the labeling of the products to be tank mixed.

Method of Application

Ground Application: Apply a minimum spray volume of 10 gallons of water per acre. Use higher volumes to ensure adequate coverage in high densities of emerged weeds or heavy trash. Use conventional low-pressure ground spray equipment with flat fan spray nozzles at 20 to 40 psi. An off-center nozzle positioned at the end of the boom can be used. Spray equipment calibrated carefully before each use.

Chemigation Application: Apply this product only through flood (basin) irrigation systems, or low-volume sprinkler (microsprinkler) and drip (trickle) irrigation systems designed to distribute irrigation water beneath the tree canopy. For additional information on these systems, see the APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION section of this label.

Cultural Considerations for All Applications: In order to provide maximum effectiveness of preemergence activity of LIBERTY OXYFLUORFEN 4L, the berm or soil surface level, smooth, and free of crop or weed trash (decaying leaves, clippings, dead weeds, etc.). Remove leaves and trash by blowing the area to be treated or by thoroughly mixing the trash into the soil through cultivation prior to herbicide applications.

Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of LIBERTY OXYFLUORFEN 4L. Cutting water furrows or cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment. The best results are from applications to established berms or soil surfaces that are left undisturbed during the time period for which weed control is desired.

**GRAPES (Non-Dormant Application)
(For Use Only in California)**

LIBERTY OXYFLUORFEN 4L may be applied as a directed spray or, for supplemental preemergence weed control, through low-volume sprinkler (micro sprinkler) or drip irrigation systems for control or suppression of listed broadleaf weeds in non-dormant grapes (raisin and wine grapes only). LIBERTY OXYFLUORFEN 4L may also be applied to all grapes (raisin, table, and wine) as a dormant season application. Refer to Tree Fruit/Nut/Vine Crops (Dormant Application) section above for use directions for dormant season application to grapes.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1 (0.5 lb ai)	LIBERTY OXYFLUORFEN 4L may be applied preemergence or postemergence to weeds either as a directed spray in a minimum spray volume of 20 gallons per acre or through low-volume sprinkler (micro-sprinkler) or drip irrigation systems. Repeat applications may be required. Applications may be made from completion of bloom up to 14 days before to harvest. When applied as a postemergence directed spray, add 1 quart 80% active nonionic surfactant cleared for application to growing crops per 100 gallons of spray. Sprays must be directed to the soil and the base of vines.
Postemergence	0.5 – 1 (0.25 – 0.5 lb ai)	

Tank Mixing:

When applied as a directed postemergence spray using ground equipment, this product may be applied in tank mix with paraquat or glyphosate in a minimum spray volume of 10 gallons per acre. Refer to Mixing Directions section for Tank Mixing Precautions. It is the pesticide user's responsibility to ensure that all products are registered for 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.

Chemigation: Follow chemigation instructions in Product Information section.

- Low Volume Sprinkler (Microsprinkler) and Drip (Trickle) Irrigation: Apply only through low-volume sprinkler or drip systems designed to uniformly distribute irrigation water beneath the canopy. Meter this product at a continuous rate during the middle 1/3 of the irrigation period and discontinue application during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system. Use of this product through low-volume sprinklers or drip emitters helps to reduce the "ring effect" of weed escapes in areas around sprinklers or emitters where previously applied broadcast or directed treatments begin to break down.

Precautions:

- **Crop Resistance:** The use of this product may result in varying degrees of injury to non-dormant grapes. Grape foliage will typically exhibit injury symptoms from direct or indirect (spray drift, soil contact) exposure. This injury may result in necrosis, reddening, cupping or crinkling of grape leaves. The grape plant will continue to grow normally. Grape leaves that are immature or expanding at the time of contact with this product are the most susceptible to foliage injury. Grapes may exhibit some small blemishes (spots or flecks) on the fruit.

Crop-Specific Use Restrictions:

- **DO NOT** apply more than 1 pint of (0.5 lb ai) per acre per application.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per year as a result of multiple applications in any given area (broadcast, banded, or within the wetted area of the low-volume sprinkler or drip irrigation system).
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **Preharvest Interval (PHI):** 14 days of harvest.
- **Retreatment Interval:** 4 weeks
- **DO NOT** initiate application of this product in non-dormant grapes until the completion of the bloom period.
- **DO NOT** apply to grapes established less than 3 years unless vines are either on a trellis wire a minimum of 3 feet above the soil surface, or protected by grow tubes.
- This product must be applied only by ground application equipment of through low-volume sprinkler (microsprinkler) or drip (trickle) irrigation systems.
- Apply this product as a non-dormant application to wine grapes or raisin grapes only.
- This product is phytotoxic to plant foliage. Avoid drift to all other crops and nontarget areas. **DO NOT** apply when weather conditions favor drift.

Key Weeds Controlled or Suppressed:

Preemergence	Postemergence
Burclover Cheeseweed, Malva Fiddleneck, Coast Groundsel, Common Henbit Knotweed, Prostrate Lambsquarters, Common Minerslettuce Mustard, Black Nettle, Burning Nightshade, Black Pigweed, Redroot Purslane, Common Redmaids Rocket, London Sowthistle, Annual	Cheeseweed (Malva) Fiddleneck, Coast Groundsel, Common Henbit Minerslettuce Morningglory Species, Annual Mustard, Black Nettle, Burning Nightshade, Black Pigweed, Redroot Purslane, Common Redmaids Rocket, London Sowthistle, Annual

**SUCKER CONTROL IN NON-DORMANT GRAPES
(Grapes for Wine and Processing Only)
(For Use Only in Washington and Oregon)**

Application Timing for Sucker Control	Rate (pt/acre)	Specific Use Directions
Grape suckers less than 12 inches in length	0.5 – 1 (0.25 – 0.5 lb ai)	Apply LIBERTY OXYFLUORFEN 4L in a three-foot band directed towards to newly emerging suckers at the base of the grapevine. The highest rate and/or a second application may be required to achieve an acceptable level of control/suppression of grape suckers. Avoid spray contact on flowers, grape clusters, or fruit. Use mounted nozzles to deliver the spray solution. Thorough spray coverage of sucker growth is essential for optimal activity. Use a spray volume of 50 or more gallons per acre (broadcast basis).

Tank Mixing: For enhanced postemergence sucker activity, a tank mixture of this product with either glufosinate or paraquat can be used. Apply at the specified rates and growth stages in a manner describe on the respective labels. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank-mixed products, the most restrictive label limitations must apply. It is the pesticide user's responsibility to ensure that all products are registered for 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.

Precautions:

- The use of this product may result in varying degrees of injury to non-dormant grapes. Grape foliage will typically exhibit injury symptoms from direct or indirect (spray drift or soil contact) exposure. This injury may result in necrosis, reddening, cupping or crinkling of grape leaves. The grape plant will continue to grow normally. Leaves that are immature or expanding at the time of contact with LIBERTY OXYFLUORFEN 4L are the most susceptible to injury. Grape fruit may exhibit some small blemishes (spots or flecks) on the fruit.

Crop-Specific Restrictions:

- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per application.
- **DO NOT** make more than 4 applications per acre per year.
- **DO NOT** apply more than (dormant and non-dormant) 3 pints (1.5 lb ai) per acre per year as a result of multiple applications in any give area (broadcast or banded).
- **Retreatment Interval:** 8 weeks
- This product must be applied only by ground application equipment.
- Apply this product as a non-dormant application for sucker control only to wine or processed grapes.
- **Preharvest Interval (PHI):** 60 days

**PISTACHIOS, WALNUTS, ALMONDS
(Non-Dormant Application)
(For Use Only in Arizona and California)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	2.5 – 3 (1.25 – 1.5 lb ai)	Preemergence: For residual weed control of listed weeds.
Postemergence	0.5 – 1 (0.25 – 0.5 lb ai)	Postemergence (Suppression): Apply to seedling weeds less than 4 inches in height. Repeat applications may be required.
	1 – 3 (0.5 – 1.5 lb ai)	Postemergence (Cleanup): Contact (postemergence) control for cleanup sprays and preharvest applications.

		Apply to seedling weeds less than 4 inches in height. Applications to weed seedlings beyond the 4-inch stage may result in partial control.
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Tank Mixing: For broader spectrum grass and broadleaf weed control in tree row middles, LIBERTY OXYFLUORFEN 4L may be tank mixed with either paraquat or glyphosate. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank-mixed products, the most restrictive label limitations must apply.

Chemigation: Follow chemigation instructions in PRODUCT INFORMATION section.

- **Flood (Basin) Irrigation:** For flood (basin) irrigation systems, meter continuously into the water during the entire irrigation period. Best weed control results are obtained when a uniform distribution and flow of irrigation water is maintained over level land. Irrigation water treated with this product must be contained on the treated area until the water is absorbed by the soil.
- **Low Volume Sprinkler (Microsprinkler) and Drip (Trickle) Irrigation:** Apply only through low-volume sprinkler or drip systems designed to uniformly distribute irrigation water beneath the tree canopy. Applications must be made prior to weed emergence; otherwise postemergence activity may be inconsistent due to uneven coverage. Meter this product at a continuous rate during the middle 1/3 of the irrigation period and discontinue application during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system. Use of this product through low-volume sprinklers or drip emitters helps to reduce the "ring effect" of weed escapes in areas around sprinklers or emitters where previously-applied broadcast or directed treatments begin to break down.

Precautions:

- Direct spray toward the base of trees. Avoid direct contact with foliage or nuts.
- This product must be applied only to healthy growing trees

Crop-Specific Use Restrictions:

- When applied as a non-dormant treatment, this product can only be applied to pistachio plantings between May and 7 days prior to harvest.
- When applied as a non-dormant treatment, this product can only be applied to almond plantings between April 1 and September 30 and to walnut plantings between May 1 and September 30.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per application.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre during the non-dormant season.
- **DO NOT** make more than 3 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 2 weeks
- **Preharvest Interval (PHI):**
 - **Pistachios:** 7 days
 - **Almonds:** 30 days
 - **Walnuts:** 7 days

Key Weeds Suppressed and/or Controlled

Cheeseweed (Malva) Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Filaree, Whitestem Groundsel, Common Henbit Minerslettuce	Morningglory Species, Annual Mustard, Black Nettle, Burning Pigweed, Red Root Purslane, Common Redmaids Rocket, London Sowthistle, Annual
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Additional Weeds Controlled in Tank Mix with Glyphosate or Paraquat

Barnyardgrass Bluegrass, Annual Chickweed, Common	Horseweed (Marestail) Rocket, London Ryegrass, Italian
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**ALMONDS- REDUCED PREHARVEST INTERVAL
(For Use Only in California)
Nondormant Application with a 30 to 15 Day PHI**

Weed Control	Rate (pint/acre)	Specific Use Directions
Postemergence Suppression (seedlings less than 4 inches in height.)	0.25 (0.125 lb ai)	<p>LIBERTY OXYFLUORFEN 4L provides effective suppression of cheeseweed (Malva), fleabane and marehail (horseweed) as well as other weeds listed below in non-dormant almonds when applied to young broadleaf weed seedlings. For enhanced postemergence activity against these target weeds as well as other weed species, tank mixtures of This product with either paraquat or glyphosate may be used to increase the spectrum of weed control by either of these tank mix partners. Compatibility of each mixture must be established before tank mixing and application must be applied by ground equipment. Follow all precautions and restrictions on the labeling of the products to be tank mixed.</p> <p>For summer broadleaf weed control, apply no more than 2.5 pints (1.25 lbs. active) of LIBERTY OXYFLUORFEN 4L per broadcast acre prior to the February 15 cutoff. Then for summer use, apply no more than 0.25 pints (0.125 lb ai) per broadcast acre up to 30 days before harvest, and no more than 0.25 pints (0.125 lb ai) per broadcast acre between 30 and 15 days before harvest. For a broader spectrum of grass weeds and broadleaf weeds control in the tree row middles, a tank mixture of this product with either paraquat or glyphosate can be used. Read and follow the labeling of either the paraquat or glyphosate pesticide product which is to be tank mixed with this product.</p>
<p>Ground Application: Apply a minimum spray volume of 10 gallons of water per acre. Use higher volumes to ensure adequate coverage in high densities of emerged weeds or heavy trash. Use conventional low-pressure ground spray equipment with flat fan spray nozzles at 20 to 40 psi. Position an off-center nozzle at the end of the boom. Spray equipment calibrated carefully before each use.</p>		
<p>Chemigation Application: Apply this product only through flood (basin) irrigation systems, or low-volume sprinkler (microsprinkler) and drip (trickle) irrigation systems designed to distribute irrigation water beneath the tree canopy. For additional information on these systems, see the APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION section of this label.</p>		
<p>Cultural Considerations for All Applications: In order to provide maximum effectiveness of preemergence activity this product, the berm or soil surface must be level, smooth, and free of crop or weed trash (decaying leaves, clippings, dead weeds, etc.). Remove leaves and trash by blowing the area to be treated or by thoroughly mixing the trash into the soil through cultivation prior to herbicide applications.</p>		
<p>Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of this product. Cutting water furrows or cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment.</p>		
<p>Precautions:</p> <ul style="list-style-type: none"> • Apply this product only to healthy trees. • Direct spray toward the base of the tree. Avoid direct herbicide contact with foliage and fruit. <p>Restrictions:</p> <ul style="list-style-type: none"> • When applied as a non-dormant treatment, this product can only be applied to almonds between April 1 and September 30. 		

- **DO NOT** apply more than 0.25 pints (0.125 lb ai) broadcast per acre per application
- **DO NOT** apply more than 3 pints (1.5 lb ai) broadcast per acre during the nondormant period.
- In order to use 0.25 pints (0.125 lb ai) at 15 days before harvest, no more than 2.5 pints (1.25 lb ai) must have been applied within 60 days of harvest and no more than 0.25 pints (0.125 lb ai) must have been applied within 30 days of harvest.
- **DO NOT** apply more than 3 pints (1.5 lb ai) broadcast per acre in one year.
- **DO NOT** make more than 4 applications per year when using reduced application rates.

Weeds Suppressed and/or Controlled

Cheeseweed (Malva) Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Filaree, Whitestem Groundset, Common Henbit Miner's Lettuce	Morningglory Species, Annual Mustard, Black Nettle, Burning Pigweed, Redroot Purslane, Common Redmaids Rocket, London Sowthistle, Annual
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Additional Weeds Controlled in Tank Mix with Glyphosate or Paraquat

Barnyardgrass Bluegrass, Annual Chickweed, Common Fleabane	Horseweed (Marestail) Rocket, London Ryegrass, Italian
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**WINDBREAKS AND SHELTERBELTS
(For Use Only in Minnesota, North Dakota, South Dakota and Wyoming)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 – 1.5 lb ai)	<p>Apply LIBERTY OXYFLUORFEN 4L may be applied as a broadcast, banded or post-directed spray. Preemergence control is most effective when spray is applied to clean, weed-free soil surfaces. Pre-transplant applications must be made after completion of soil preparation but prior to transplanting. Transplanting must be completed with minimal soil disturbance. For optimum weed control results, treated soil surfaces must be left undisturbed during the time period for which weed control is desired.</p> <p>Postemergence Weed Control: For best results, apply before the 4-leaf stage for broadleaf weeds or 2-leaf stage for grass weeds.</p> <p>Conifers: LIBERTY OXYFLUORFEN 4L can be applied pre-transplant, post-directed or postemergence (over-the-top) to conifers. Postemergence or post-directed applications must be applied prior to budbreak or after new growth foliage has hardened off and new terminal buds have formed.</p> <p>Deciduous Hardwoods: LIBERTY OXYFLUORFEN 4L has exhibited selectivity to many deciduous species when applied pre-transplant or as a post-directed spray prior to budbreak.</p>

Precautions:

- Important: Some varieties or cultivars of conifers or deciduous species listed may be susceptible to this product. Care must be taken to ensure that the particular variety to be sprayed with LIBERTY OXYFLUORFEN 4L is tolerant. For unfamiliar species, it is suggested that this product be tested on a limited number of plants prior to large-scale application.
- Occasionally after the use of this product, a spotting, crinkling or flecking may appear on the leaves of the deciduous species. Leaves that receive direct or indirect (drift) spray contact will be injured. Deciduous species typically rapidly outgrow these symptoms and develop normally.
- Application after budbreak may result in injury to deciduous species. If non-dormant application is required, apply only after foliage has fully expanded and hardened off. Avoid direct or indirect spray contact with the foliage by applying to the soil surface as a directed spray.
- Apply this product only to healthy deciduous and/or conifer trees.

Specific Use Restrictions for Shelterbelts:

- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per application
- **DO NOT** apply more than 9 pints (4.5 lb ai) per acre per year.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 8 weeks
- **DO NOT** apply this product to conifers or deciduous trees that have been weakened or under stress from excessive fertilizer or soil salts, disease, nematodes, frost, drought, flooding, previously applied pesticides, soil insects, or winter injury, as severe injury may result.

Key Broadleaf Weeds Controlled:

Buckwheat, Wild	Mustard, Wild
Burclover	Nettle, Burning
Carpetweed	Nightshade, Black
Dock, Curly	Nightshade, Hairy
Groundcherry, Cutleaf	Oats, Wild
Groundcherry, Wright	Orach, Red
Groundsel, Common	Pepperweed, Yellow Flower
Henbit	Pigweed, Prostrate
Jimsonweed	Pigweed, Red Root
Knotweed, Prostrate	Purslane, Common
Kochia	Rocket, London
Ladysthumb	Shepherdspurse ¹
Lambsquarters, Common	Smartweed, Pennsylvania
Lettuce, Prickly	Sowthistle, Annual
Mallow, Little	Tansymustard
Mayweed	Thistle, Russian (Seedling)
Mustard, Blue	Velvetleaf
Mustard, Tumble	

¹The highest rate or multiple applications may be required for acceptable control.

Key Grasses Controlled:

Barnyardgrass	Foxtail, Giant
Bluegrass, Annual	Goosegrass
Crabgrass, Large	Witchgrass

LIBERTY OXYFLUORFEN 4L may be applied to numerous conifer and deciduous species, including the following:

Conifer Species

Common Name	Scientific Name
Douglas-fir	<i>Pseudotsuga menziesii</i>
Fir	
Grand	<i>Abies grandis</i>
Fraser	<i>Abies fraseri</i>
Noble	<i>Abies procera</i>

Hemlock Eastern Hemlock Western Hemlock	<i>Tsuga canadensis</i> <i>Tsuga heterophylla</i>
Pine Austrian Eastern White Jack Himalayan Loblolly Lodgepole Longleaf Monterey Mugo Ponderosa Scotch Shortleaf Slash Virginia	<i>Pinus nigra</i> <i>Pinus strobus</i> <i>Pinus banksiana</i> <i>Pinus griffithii</i> <i>Pinus taeda</i> <i>Pinus contorta</i> <i>Pinus palustris</i> <i>Pinus radiata</i> <i>Pinus mugo</i> <i>Pinus ponderosa</i> <i>Pinus sylvestris</i> <i>Pinus echinate</i> <i>Pinus elliotii</i> <i>Pinus virginiana</i>
Spruce Blue Dwarf Alberta Norway Sitka	<i>Picea pungens</i> <i>Picea glauca Conica</i> <i>Picea abies</i> <i>Picea sitchensis</i>
Arborvitae	<i>Thuja occidentalis</i> <i>Thuia orientalis</i>
Juniper	<i>Juniperus chinensis</i> <i>Juniperus horizontalis</i> <i>Juniperus procumbens</i> <i>Juniperus sabina</i> <i>Juniperus scopulorum</i>
Red cedar	<i>Juniperus virginiana</i>
Yew	<i>Taxus</i> spp.

Deciduous Hardwood Species

Common Name	Scientific Name
Ash	<i>Fraxinus</i> spp.
Crabapple	<i>Malus</i> spp.
Eucalyptus	<i>Eucalyptus</i> spp.
Lilac	<i>Syringa vulgaris</i>
Maple, Black	<i>Acer nigrum</i>
Oak, Northern Red	<i>Quercus rubra</i>
Olive, Russian	<i>Elaeagnus angustifolia</i>
Poplar (Cottonwood)	<i>Populus</i> spp.
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Platanus occidentalis</i>
Walnut, Black	<i>Juglans nigra</i>

STORAGE AND DISPOSAL

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

Pesticide Storage: Keep container tightly closed when not in use. Keep from freezing. Store above 32°F.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used must be disposed on a landfill approved for pesticides. 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] NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[PLASTIC] NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows (all sizes): 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.

[PLASTIC] REFILLABLE CONTAINER: Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. After triple rinsing is complete, and the container is not suitable for refilling or reconditioning, offer the container for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONDITION 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 must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of LIBERTY CROP PROTECTION, LLC or 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 LIBERTY CROP PROTECTION, LLC and Seller harmless for any claims relating to such factors.

To the extent consistent with applicable law, LIBERTY CROP PROTECTION, LLC warrants that This product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or LIBERTY CROP PROTECTION LLC, and Buyer and User assume the risk of any such use. LIBERTY CROP PROTECTION, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither LIBERTY CROP PROTECTION, LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. To the extent consistent with state law, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF LIBERTY CROP PROTECTION, LLC 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 LIBERTY CROP PROTECTION, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

LIBERTY CROP PROTECTION, LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of Sale and Limitation of Warranty and Liability which may not be modified except by written agreement signed by a duly authorized representative of LIBERTY CROP PROTECTION, LLC.

All trademarks are the property of their respective owners.

{Note to reviewer: [Text] in brackets denotes optional or explanatory language}
{Note to reviewer: {Text} in braces denotes where in the final label text will appear}
{BOOKLET FRONT PANEL LANGUAGE}

OXYFLUORFEN	GROUP	14	HERBICIDE
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LIBERTY OXYFLUORFEN 4L

HERBICIDE

[For Weed Control In: Artichokes (Globe), Broccoli/Cabbage/Cauliflower, Cacao, Citrus (Nonbearing), Coffee, Conifer (Seedbeds, Transplants, Container Stock) And Selected Deciduous Trees, Corn, Cotton, Cottonwood, Eucalyptus, Fallow Bed, (Cotton/Soybeans) Fallow Land, Garbanzo Beans, Garlic, Guava, Horseradish, Jojoba, Mint (Spearmint and Peppermint Tops), Onions, Onions Grown for Seed, Papaya, Soybeans, Taro, Tree Fruit/Nut/Vine]
[For Preemergence and Postemergence Weed Control in Labeled Crops]

ACTIVE INGREDIENT:	% BY WT.
Oxyfluorfen: 2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4-(trifluoromethyl)benzene	41%
OTHER INGREDIENTS:	59%
TOTAL:	100%

Contains 4 pounds active ingredient per gallon.

[SHAKE WELL BEFORE USING]
[RECIRCULATE CONTENTS BEFORE USE]

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.)

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300.

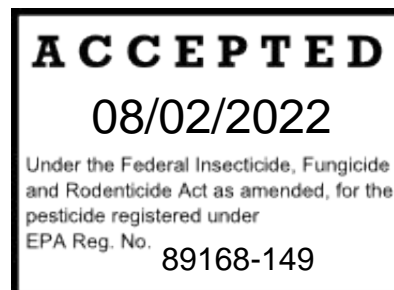
[SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS.]
[See inside booklet for additional Precautionary Statements and Directions for Use.]

EPA Reg. No.: 89168-RUO

EPA Est. No.: _____

Net Contents: ____ Gal (____ L)

Manufactured For:
LIBERTY CROP PROTECTION, LLC
1880 Fall River Drive, Suite 100
Loveland, CO 80538



072822

{LANGUAGE INSIDE BOOKLET}

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

Avoid contact with skin or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders and applicators using engineering controls (see Engineering Controls requirements below) must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves when mixing and loading
- Chemical-resistant apron when mixing and loading

All other mixers, loaders, applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Protective eyewear (goggles or face shield)
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when exposed to the product concentrate

User Safety Requirement

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

Engineering Controls

Mixers and loaders supporting aerial applications to fallow land or ground applications to corn, cotton, or soybeans must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], and must:

- Wear the personal protective equipment required above for mixers/loaders using engineering controls
- Wear protective eyewear if the system operates under pressure, and
- Be provided and have immediately available for use in case of emergency, including a broken package, spill, or equipment breakdown, coveralls and chemical-resistant footwear.

Handlers performing applications to corn must use an enclosed cab that meets the definition in the Worker Protection Standard for agricultural pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, such applicators must:

- Wear the personal protective equipment required above for applicators using engineering controls
- Be provided and must have immediately available for use in an emergency when they must exit the cab in the treated area: coveralls, chemical-resistant gloves, chemical-resistant footwear, and chemical-resistant headgear, if overhead exposure.
- Take off any PPE that was worn in the treated area before reentering the cab, and
- Store all such PPE in a chemical-resistant container, including a plastic bag, to prevent contamination of the inside of the cab.

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)];

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

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates and wildlife. **DO NOT** apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. See Directions for Use for additional restrictions. **DO NOT** contaminate water when disposing of equipment wash water or rinsate.

Surface Water Advisories

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential loading of oxyfluorfen from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

Non-Target Organism Advisory

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

PHYSICAL AND CHEMICAL HAZARDS

DO NOT mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

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

Read all Directions for Use carefully before applying. **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, except for the following:

- **Onions, garlic and horseradish: The REI is 48 hours**

For early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant footwear plus socks

- Chemical-resistant gloves
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron

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.

DO NOT enter or allow others to enter until sprays have dried.

PRODUCT INFORMATION

LIBERTY OXYFLUORFEN 4L is a selective herbicide for postemergence and preemergence residual weed control in labeled crops. Directions provided in the Use Information section of this label apply to all uses of this product. Use directions for listed crops are provided in the Crop-Specific Use Directions section of this label.

Use Restrictions

The following use restrictions apply to all labeled uses of LIBERTY OXYFLUORFEN 4L (Refer to directions for use for individual crops for additional crop-specific use restrictions.):

- **DO NOT** graze or harvest plants from areas treated with this product for feed or forage.
- Apply LIBERTY OXYFLUORFEN 4L only with ground equipment unless otherwise specified in crop-specific use directions.
- This product is phytotoxic to plant foliage. Avoid accidental spray contact or drift with established crops.
- **DO NOT** apply when weather conditions favor drift to non-target areas.
- Some labeled crops are tolerant to over-the-top applications of this product if applied during dormancy.
- **DO NOT** make over-the-top applications unless specifically allowed in crop-specific use directions.
- **DO NOT** treat ditch banks or waterways with this product or contaminate water used for irrigation or domestic purposes.
- **DO NOT** apply this product in enclosed greenhouses as foliage injury will result.

WEED RESISTANCE-MANAGEMENT

For resistance management, this product is a Group 14 herbicide. Any weed population may contain plants naturally resistant to this product and other Group 14 herbicides. The resistant individual may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies must be followed.

Weed Management

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

- Rotate the use of this product or other Group 14 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in the field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species

normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method 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, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact LIBERTY CROP PROTECTION, LLC at 844-425-8488.

Management of Resistant Biotypes

Since the occurrence of resistant weeds cannot be determined until after product use and scientific confirmation, to the extent consistent with applicable law, manufacturer is not responsible for any losses that may result from the failure of this product to control resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product must be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these Mode of Actions have been found in your region. **DO NOT** assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

Integrated Pest (Weed) Management

This product may be integrated into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) must be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

MANDATORY SPRAY DRIFT

Aerial Applications

- **DO NOT** release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators must select nozzle and pressure that deliver a coarse or coarser spray droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.
- When wind speeds are 5 to 10 mph maintain a minimum downwind buffer zone of at least 1/2 mile from all crops and desirable vegetation, except the following:

- 150 feet from dormant tree fruit/nut/vine crops and overwintering sugar beets.
 - 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seedling sugar beets, and non-target vegetable fallow beds.
 - For upwind and side borders, maintain buffer zone of 150 feet from any non-targeted vegetable fallow bed, crop, or desirable vegetation.
- Ground Boom Applications**
- Apply with the nozzle height specified by the manufacturer, but no more than 3 feet above the ground or crop canopy.
 - For all applications, applicators are required to use a coarse or coarser spray 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.
- Boom-less Ground Applications**
- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1) for all applications.
 - **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 specified 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 directions for setting up nozzles. To reduce fine droplets, nozzles must be oriented parallel with the airflow in flight.

Boom-less Ground Applications

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications

- Take precautions to minimize spray drift.

BOOM HEIGHT - Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom must remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift. When applying aurally to crops, **DO NOT** release spray at a height greater than 10 feet above the crop canopy, unless a greater application height is necessary for pilot safety.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

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

WIND

Drift potential 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 Buffer Restrictions

- A 25-foot vegetative buffer strip must be maintained between all areas treated with this product and lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.
- **DO NOT** allow spray to drift from the application site and contact people, structures people may occupy at any time and the associated property, parks and recreation areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.
- Use coarse spray according to ASAE 572 definition for standard nozzles or VMD of 475 microns for spinning atomizer nozzles.

Rotational Crop Restrictions

- **DO NOT** rotate to small-grain crops (includes barley, buckwheat, corn, pearl millet, proso millet, oats, popcorn, rice, rye, sorghum, triticale, wheat, wild rice) within 10 months following an application of LIBERTY OXYFLUORFEN 4L.
- **DO NOT** direct seed any crop, other than a crop labeled for use with LIBERTY OXYFLUORFEN 4L, within 60 days following application.
- **DO NOT** transplant seedlings of crops, other than crops labeled for use with LIBERTY OXYFLUORFEN 4L, within 30 days following application.

IMPORTANT: Unless otherwise specified elsewhere in this label or LIBERTY CROP PROTECTION, LLC supplemental label, treated soil must be thoroughly mixed to a depth of 4 inches after harvest (or abandoning) of the treated crop but prior to planting of the rotational crop. Failure to achieve thorough and complete mixing or to follow the required minimum plant-back interval may result in crop injury, stand reduction and/or vigor reduction of the plant-back crop. See specific fallow bed labeling instructions for required treatment-to-planting intervals following application of LIBERTY OXYFLUORFEN 4L to fallow beds or fallow fields.

Weeds Controlled

Common Name	Scientific Name
Ageratum	<i>Ageratum conyzoides</i>
Amaranth, spiny	<i>Amaranthus spinosus</i>
Balsamapple	<i>Momordica charantia</i>
Barnyardgrass (watergrass) ¹	<i>Echinochloa crus-galli</i>
Bedstraw, catchweed	<i>Galium aparine</i>
Bittercress, lesser	<i>Cardamine oligosperma</i>
Bluegrass, annual ¹	<i>Poa annua</i>
Buckwheat, wild	<i>Polygonum convolvulus</i>
Burclover	<i>Medicago hispida</i>
Buttercup, smallflower	<i>Ranunculus abortivus</i>
Buttonweed	<i>Borreria laevis</i>
Camphorweed	<i>Heterotheca subaxillaris</i>

Canarygrass (annual)	<i>Phalaris canariensis</i>
Carpetweed	<i>Mollugo verticillata</i>
Cheeseweed (malva)	<i>Malva parviflora</i>
Clover, red ¹	<i>Trifolium pratense</i>
Clover, white ¹	<i>Trifolium repens</i>
Cocklebur, common	<i>Xanthium pensylvanicum</i>
Crabgrass, large (hairy) ¹	<i>Digitaria sanguinalis</i>
Crotalaria	<i>Crotalaria species</i>
Croton, tropic	<i>Croton glandulosus</i>
Cudweed, narrowleaf	<i>Gnaphalium falcatum</i>
Eveningprimrose, cutleaf	<i>Oenothera laciniata</i>
Fiddleneck, coast ¹	<i>Amsinckia intermedia</i>
Filaree, broadleaf	<i>Erodium botrys</i>
Filaree, redstem	<i>Erodium cicutarium</i>
Filaree, whitestem	<i>Erodium moschatum</i>
Fireweed (from seed)	<i>Epilobium angustifolium</i>
Flixweed	<i>Descurainia sophia</i>
Foxtail, giant ¹	<i>Setaria faberi</i>
Foxtail, green	<i>Setaria viridis</i>
Foxtail, yellow	<i>Setaria lutescens</i>
Geranium, Carolina	<i>Geranium carolinianum</i>
Goosegrass ¹	<i>Eleusine indica</i>
Groundcherry, cutleaf	<i>Physalis angulata</i>
Groundcherry, Wright	<i>Physalis wrightii</i>
Groundsel, common	<i>Senecio vulgaris</i>
Henbit	<i>Lamium amplexicaule</i>
Horseweed (marestail)	<i>Conyza canadensis</i>
Jimsonweed	<i>Datura stramonium</i>
Johnsongrass, seedling	<i>Sorghum halepense</i>
Knotweed, prostrate	<i>Polygonum aviculare</i>
Ladysthumb (smartweed)	<i>Polygonum persicaria</i>
Lambsquarters, common	<i>Chenopodium album</i>
Lettuce, prickly (china lettuce)	<i>Lactuca serriola</i>
Mallow, little (malva)	<i>Malva parviflora</i>
Mayweed (dog fennel)	<i>Anthemis cotula</i>
Minerslettuce	<i>Montia perfoliata</i>
Morningglory species, annual	<i>Ipomoea species</i>
Morningglory, ivyleaf ¹	<i>Ipomoea hederacea</i>
Morningglory, tall ¹	<i>Ipomoea purpurea</i>
Mustard, black	<i>Brassica nigra</i>
Mustard, blue (purple mustard)	<i>Chorispora tenella</i>
Mustard, common yellow	<i>Brassica campestris</i>
Mustard, hedge	<i>Sisymbrium officinale</i>
Mustard, tumble (Jim hill mustard)	<i>Sisymbrium altissimum</i>
Mustard, wild	<i>Brassica kaber</i>
Nettle, burning	<i>Urtica urens</i>
Nightshade, American black	<i>Solanum americanum</i>
Nightshade, black	<i>Solanum nigrum</i>
Nightshade, hairy	<i>Solanum sarrachoides</i>
Oats, wild	<i>Avena fatua</i>
Orach, red	<i>Atriplex rosea</i>
Oxalis (bermuda buttercup)	<i>Oxalis pes-caprae</i>
Panicum, fall	<i>Panicum dichotomiflorum</i>

Pepperweed, Virginia	<i>Lepidium virginicum</i>
Pepperweed, yellowflower	<i>Lepidium perfoliatum</i>
Pigweed, prostrate	<i>Amaranthus blitoides</i>
Pigweed, redroot	<i>Amaranthus retroflexus</i>
Pimpernel, scarlet	<i>Anagallis arvensis</i>
Poinsettia, wild	<i>Euphorbia heterophylla</i>
Puncturevine	<i>Tribulus terrestris</i>
Purslane, common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Ragweed, common	<i>Ambrosia artemisiifolia</i>
Redmaids	<i>Calandrinia caulescens</i>
Rocket, London	<i>Sisymbrium irio</i>
Ryegrass, Italian	<i>Lolium multiflorum</i>
Sage, lanceleaf	<i>Salvia reflexa</i>
Sandbur, field	<i>Cenchrus incertus</i>
Sandspurry, red	<i>Spergularia rubra</i>
Sesbania, hemp	<i>Sesbania exaltata</i>
Shepherdspurse ¹	<i>Capsella bursa-pastoris</i>
Sicklepod	<i>Cassia obtusifolia</i>
Sida, prickly (teaweed)	<i>Sida spinosa</i>
Signalgrass, broadleaf	<i>Brachiaria platyphylla</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Sorrel, red (from seed)	<i>Rumex acetosella</i>
Sowthistle, annual	<i>Sonchus oleraceus</i>
Speedwell, birdseye	<i>Veronica persica</i>
Spurge, garden	<i>Euphorbia hirta</i>
Spurge, prostrate ²	<i>Euphorbia supina</i>
Spurge, spotted ²	<i>Euphorbia maculata</i>
Spurry, corn	<i>Spergula arvensis</i>
Tansymustard	<i>Descurainia pinnata</i>
Thistle, bull ²	<i>Cirsium vulgare</i>
Thistle, Russian	<i>Salsola kali</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Witchgrass	<i>Panicum capillare</i>
Witchweed	<i>Striga asiatica</i>
Woodsorrel, common yellow ²	<i>Oxalis stricta</i>
¹ Highest rate and/or multiple applications may be required for acceptable control.	
² Preemergence control only.	

Application Methods and Cultural Practices Preemergence Weed Control

Apply the specified rate in a broadcast spray volume [of 15 or more gallons] of water per acre using calibrated spray equipment capable of uniform application to the soil surface. Seedling weeds are controlled as they come in contact with the soil-applied herbicide during emergence. Preemergence weed control is most effective when LIBERTY OXYFLUORFEN 4L is applied to soil surfaces that are clean (free of crop or weed residues or clippings) and weed free. Prior to application, weed or crop residues must be removed by thorough incorporation into the soil using tillage equipment or by blowing the area to be treated. At least 0.25 inch of irrigation or rainfall is required to activate LIBERTY OXYFLUORFEN 4L and must occur within 3 or 4 weeks after application. For optimum results, LIBERTY OXYFLUORFEN 4L must be applied to prepared beds or soil surfaces that will be left undisturbed during the time period for which weed control is desired. Cultural practices that disturb or redistribute surface soil following treatment with LIBERTY OXYFLUORFEN 4L including cutting water furrows will reduce weed control effectiveness.

Application Rates and Rate Ranges: Where rate ranges are given, use the lower rate in the rate range on coarse texture soils with less than 1% organic matter and lighter weed infestations. Use higher rates in the rate range on medium to fine texture soils, soils containing greater than 1% organic matter, heavy weed infestations, or for extended residual preemergence weed control.

Postemergence Weed Control

Apply the specified rate in a broadcast spray volume of 20 or more gallons of water per acre (a minimum 10 gallons if applying LIBERTY OXYFLUORFEN 4L in tank mix with glyphosate). Because LIBERTY OXYFLUORFEN 4L is a contact herbicide, complete and uniform coverage of weed foliage is essential for optimum postemergence control. Increase the spray volume to ensure complete and uniform coverage as weed height and density increases or in the presence of heavy trash (weed or crop residue). Postemergence applications of LIBERTY OXYFLUORFEN 4L are most effective when made to weeds at the seedling stage. Applications made later than the 4-inch or 4 leaf stage may result in partial control or suppression. Postemergence applications must be made to seedling grasses not exceeding the 2-leaf stage. The addition of 0.25% v/v (2 pints per 100 gallons of spray) of an 80% active nonionic surfactant, labeled for application to growing crops, will enhance herbicidal effectiveness in controlling emerged weeds.

Postemergence Application Rates: Where a rate range is given, use a higher rate in the rate range for heavy weed infestations, weeds in advanced stages of growth or for extended residual preemergence weed control following control of existing emerged weeds.

Ground Application

Ground Broadcast: Apply LIBERTY OXYFLUORFEN 4L using conventional low-pressure ground spray equipment with flat fan spray nozzles. Follow manufacturer's specifications for spraying pressure and boom height. An off-center (OC) nozzle positioned at the end of the boom may be desired. Check calibration of spray equipment before each use.

Directed Sprays: Apply LIBERTY OXYFLUORFEN 4L as a coarse low-pressure spray in a spray volume of 20 or more gallons of spray per acre (broadcast basis). Follow manufacturer's specifications for nozzle spacing and operating pressure. Spray must be directed toward the soil at the base of the crop. In row crops, use a minimum of 2 flat fan nozzles per row (one on each side) and for optimum spray coverage use 4 flat fan nozzles per row (two on each side). The 2 forward nozzles must point forward and downward while the rear nozzles must point to the rear and downward. With either sprayer system, nozzles must be adjusted to cover the weed foliage but minimize contact with the crop. **DO NOT** apply with hollow cone nozzles.

IMPORTANT: LIBERTY OXYFLUORFEN 4L is a contact herbicide. Contact of sprays or drift with foliage or green stems can cause severe crop injury. Use directed sprays and spray shields and/or leaf lifters as necessary to minimize contact of spray or drift with crop foliage or stems. Young green stems of woody plants are also susceptible to injury from spray contact. Potential for injury to woody stems diminishes with loss of green color and the development of relatively impervious non-living corky tissue (bark) on the surface of the stem.

Band Application: Application rates listed in this label are for broadcast application. For band application, the rate per broadcast acre must be reduced according to the following formula:

$$\frac{\text{Band Width (in inches)}}{\text{Row Width (in inches)}} \times \text{Rate per Broadcast Acre} = \text{Amount Needed per Acre for Banded Application}$$

Spot Application

For spot application, apply sprays uniformly to soil for preemergence weed control or on a spray-to-wet basis for postemergence weed control. Mix the required amount of LIBERTY OXYFLUORFEN 4L with the specified amount of water. For preemergence weed control, use 0.5 to 1 gallon of spray per 1000 square feet. For postemergence weed control use a minimum of 1 gallon of spray per 1000 square feet and add

an 80% nonionic surfactant at the rate of 0.5 fluid ounce (1 Tablespoon) per gallon of spray. If making spot applications within an established crop, use coarse low-pressure sprays and direct the spray to the soil beneath the plants. To avoid crop injury, **DO NOT** allow spray to contact leaves and stems of herbaceous plants or leaves or green stems of woody plants.

Amount of LIBERTY OXYFLUORFEN 4L Required to Treat 1000 Square Feet at Specified Application Rate					
0.25 pt/acre (0.125 lb ai)	0.5 pt/acre (0.25 lb ai)	1.0 pt/acre (0.5 lb ai)	1.5 pt/acre (0.75 lb ai)	2.0 pt/acre (1.0 lb ai)	4.0 pt/acre (2.0 lb ai)
0.1 fl oz (2.75 ml)	0.2 fl oz (5.5 ml)	0.4 fl oz (11 ml)	0.55 fl oz (16.5 ml)	0.75 fl oz (22 ml)	1.5 fl oz (44 ml)

1 pint = 16 fluid ounces; 1 fluid ounce = 29.6 (30) ml

Aerial Application

Use aerial boom equipment designed for use with herbicides and a minimum spray volume of 10 gallons per acre (5 gallons per acre if tank mixed with glyphosate). **DO NOT** aerially apply LIBERTY OXYFLUORFEN 4L unless crop-specific use directions specifically allow and provide directions for aerial application.

Avoid Drift: Exercise extreme care to avoid herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result. Extreme care must be exercised to prevent spray drift that could result in damage to other crops or desirable vegetation. Adhere to the following guidelines when aerial applications are to be made.

Where states have more stringent regulations, they must be observed.

The use of a drift control agent may be required by local regulations. However, the drift control agent may decrease the weed control effectiveness.

Chemigation Instructions

Apply this product only through sprinkler (center pivot, solid set, portable lateral, or low-volume (micro sprinkler)), drip (trickle), or flood (basin) irrigation systems. Refer to use directions for specific crops for instructions as to which type of irrigation system may be used.

- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
- If you have questions about calibration, contact the State Extension Service specialists, equipment manufacturers, or other experts.
- **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.
- 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 if the need arise.

Restrictions

- **DO NOT** apply this product through any irrigation system unless the instructions for chemigation are followed.
- **DO NOT** apply LIBERTY OXYFLUORFEN 4L through chemigation equipment unless chemigation is allowed by Crop-Specific Use Directions.
- **DO NOT** apply this product through any other type of irrigation system.

Sprinkler Chemigation (Foliar Spray Uses)

For sprinkler irrigation, sufficient water must be applied at the beginning of the irrigation period to insure uniform wetting of the plant and/or soil surfaces. Meter LIBERTY OXYFLUORFEN 4L into the sprinkler irrigation system at a continuous uniform rate during the middle 1/3 of the irrigation period to allow for

uniform distribution to target weeds and/or soil surface. Continue irrigation during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system. During sprinkler irrigation, sufficient water must be applied to insure water penetration to a depth of two inches.

Avoid Drift: Extreme care must be exercised to prevent spray drift that could result in damage to other crops or desirable vegetation. Use the following guidelines when applications of LIBERTY OXYFLUORFEN 4L are made through sprinkler irrigation equipment:

- **DO NOT** apply when the wind direction is not stable, when inversion conditions exist, or when wind velocity exceeds 10 mph.
- When wind speeds are 5 mph or less, maintain a minimum downwind buffer zone of at least 1/2 mile from all crops and desirable vegetation, except for the following:
- Maintain a minimum downwind buffer zone of:
 - 150 feet from dormant tree fruits, dormant vines and overwintering sugar beets.
 - 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seedling sugar beets and vegetable fallow beds.
- When wind speeds are between 5 and 10 mph, downwind buffer zones in excess of those listed above are suggested.
- For upwind and side borders, maintain a minimum buffer zone of 150 feet from any vegetable fallow bed, crop, or desirable vegetation.

To apply a pesticide using sprinkler chemigation, the chemigation system must meet the following specifications:

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

Flood (Basin) Chemigation (Soil Drench Uses)

LIBERTY OXYFLUORFEN 4L must be continuously metered into the water during the entire irrigation period. Agitation in the pesticide supply tank is suggested. Best weed control results from LIBERTY OXYFLUORFEN 4L applied through flood (basin) irrigation systems are obtained when a uniform distribution and flow of irrigation water is maintained over level land.

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity including drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain 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, including a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Drip (Trickle) Chemigation (Soil Drench Uses)

To achieve optimum distribution of LIBERTY OXYFLUORFEN 4L in the soil surface, meter LIBERTY OXYFLUORFEN 4L at a continuous uniform rate during the middle 1/3 of the irrigation period. For best results, LIBERTY OXYFLUORFEN 4L must be uniformly distributed across the wetted area to help reduce the "ring effect" of weed escapes. Continue irrigation during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system.

To apply a pesticide using drip (trickle) chemigation, the chemigation system must meet the following specifications:

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pipe 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 including a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Chemigation Calibration: For Low-Volume Sprinklers (Microsprinklers) and Drip (Trickle) Irrigation Systems

Calculation of use rate is based on wetted area around emitters - NOT on grove acres. To determine correct amount of LIBERTY OXYFLUORFEN 4L, use the following formula:

1. Treated area per each emitter = A

$$A = 3.14 \times (\text{radius} \times \text{radius})$$

Example: If the average distance from emitter to perimeter of wetted area measured at the soil surface is 13 inches, then

$$A = 3.14 \times (13" \times 13")$$

$$A = 3.14 \times (169)$$

$$A = 530.7 \text{ square inches}$$

2. The area in square feet wet in each acre = B

$$B = \frac{A \times \text{emitters/acre}}{144}$$

Example: If there are 300 emitters per acre, then
 $B = \frac{530.7 \times 300}{144} = B = 1105.6$ square feet wetted per acre

3. The total area (in square feet) wet by your system = C
 $C = B \times \text{acres covered by system}$

Example: If the system covers 20 acres, then
 $C = 1105.6$ square feet per acre \times 20 acres
 $C = 22,112$ square feet wetted by system

4. Amount of this product to inject = S

Rate per treated acre of this product = R

$$S = \frac{C \times R}{43,560} = \text{quarts of this product}$$

Example: If the desired application rate per treated acre is 1 quart of this product, then

$$S = \frac{22,112 \times 1.0}{43,560} = S = 0.507 \text{ quarts of this product must be injected into system.}$$

Note: Select the proper rate based on weed spectrum and desired length of control (See RATE RANGES section below).

Chemigation Systems Connected to Public Water Systems

If the chemigation system is connected to a public water supply, the following conditions must also be met:

- Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from a point of pesticide introduction. As an option to the RPZ, the water from the public water system must be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shutdown.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, including a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Mixing Directions

Shake well before use. Fill the spray tank at least one-third full of clean water. With the pump and agitator running, add the specified amount of herbicides to the spray tank. The order of addition to the spray tank must be (1) wettable powders, (2) flowables and (3) soluble liquids. Complete filling of the spray tank with water.

Use of Surfactants: For all applications of LIBERTY OXYFLUORFEN 4L where postemergence weed control is desired (except garlic and onions), add a minimum of 2 pints of 80% active nonionic surfactant (cleared for application to growing crops) per each 100 gallons of spray. The addition of 4 pints of nonionic surfactant is advised to enhance postemergence activity when hard water (greater than 600 ppm) is used. Maintain agitation until spraying is completed.

Tank Mixing Precautions

- Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply.

Tank Mixing 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.
- Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply.
- **DO NOT** exceed specified application rates.
- **DO NOT** tank mix this product with another pesticide that contains the same active ingredient as this product unless the label of either tank mix partner specifies the maximum dosages that may be used.

Tank Mix Compatibility Testing: Perform a jar test prior to tank mixing to ensure compatibility of this product and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, gels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination must not be used.

Sprayer Clean-up: Thoroughly flush spray equipment (tank, pump, hoses and boom) with clean water before and after each use. Residues of LIBERTY OXYFLUORFEN 4L remaining in spray equipment may damage other crops. The addition of a non-ionic surfactant to equipment flushing waters at the rate of 1 quart per 100 gallons is specified to aid in removal of residues of LIBERTY OXYFLUORFEN 4L.

Crop-Specific Use Directions

**ARTICHOKE (GLOBE)
For Pre-Transplanting and Post-Crown Planting Applications to Artichokes
(For Use Only in California)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.5 – 2 (0.25 – 1.0 lb ai)	LIBERTY OXYFLUORFEN 4L may be applied for pre-emergence and post-emergence control of listed broadleaf weeds, applied pre-transplant for annual artichokes, and post-transplant for perennial artichokes. LIBERTY OXYFLUORFEN 4L also may be used for layby applications. For pre-transplant applications for annual artichokes, apply 0.5 to 2 pints (0.25 – 1.0 lb ai) per acre, at least two days before transplanting. For post-plant applications over the top of perennial artichokes after planting of crowns, apply 0.5 to 2 pints (0.25 – 1.0 lb ai) per acre, within two days after crown planting and before irrigation. Ground application is advised. For broadcast

		applications, a minimum spray volume of 40 gallons of water per acre is advised. For aerial application, use a minimum of 10 gallons of water per acre.
Precautions:		
<ul style="list-style-type: none"> Higher rates in this rate range will provide a longer interval of weed control, but may increase the potential for crop injury. During cold, wet growing conditions, the crop is more susceptible to crop injury. In these situations, the lower end of the rate range must be considered. DO NOT use if the risk of crop injury under these conditions is considered unacceptable. Control may be reduced if thorough soil coverage is not achieved. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> DO NOT apply more than 2 pints (1.0 lb ai) per acre per application. Including layby applications, DO NOT apply more than 4 pints (2.0 lb ai) per acre per year. Preharvest Interval (PHI): 90 days. Retreatment Interval: 8 weeks 		

Dosage and Timing

The rates listed on this label are broadcast rates. For banded applications, reduce these rates proportionally to the band width.

Key Weeds Controlled:

Preemergence	Postemergence
cheeseweed (malva) groundsel, common lambquarters, common mustard, common yellow oxalis (bermuda buttercup)* shepherdspurse sowthistle, annual	cheeseweed (malva) groundsel, common mustard, common yellow nettle, burning oxalis (bermuda buttercup) shepherdspurse sowthistle, annual
*Suppression	

ARTICHOKE (GLOBE) Post-Directed Spray Application

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 – 1.5 lb ai)	<p>Application Method: Apply as a directed spray to the soil surface between the rows and at the base of artichoke plants in a minimum spray volume of 40 gallons per acre.</p> <p>Timing to Crop: Apply after completion of ditching operations. Separate applications of up to 2 pints (1.0 lb ai) per acre may be made 8 to 10 weeks apart or a single application of up to 3 pints (1.5 lb ai) per acre may be made.</p> <p>Timing to Weeds: Preemergence up to 8 leaf stage.</p>
Precautions:		
<ul style="list-style-type: none"> Application of LIBERTY OXYFLUORFEN 4L to artichoke plantings must be delayed a minimum of 60 days after cutting back or transplanting. 		
Restrictions:		
<ul style="list-style-type: none"> DO NOT apply over-the-top. Contact with direct spray or drift will cause injury to artichoke fronds or severe injury to buds or flowers. DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. DO NOT apply more than 3 pints (1.5 lb ai) per acre per year. DO NOT make more than 2 application per acre per year when using reduced application rates. 		

- **Retreatment Interval:** 8 weeks
- **Preharvest Interval (PHI):** 5 days

Key Weeds Controlled:

Preemergence	Postemergence
cheeseweed (malva) groundsel, common lambsquarters, common mustard, common yellow oxalis (bermuda buttercup)* shepherdspurse sowthistle, annual	cheeseweed (malva) groundsel, common mustard, common yellow nettle, burning oxalis (bermuda buttercup) shepherdspurse sowthistle, annual
*Suppression	

**BLACKBERRY AND RASPBERRY PRIMOCANE SUPPRESSION
(For Use Only in Oregon and Washington)**

Crop	Rate (pt/acre)*	Specific Use Directions
Blackberry	0.8 - 1.6 (0.4 – 0.8 lb ai)	Apply LIBERTY OXYFLUORFEN 4L in a minimum spray volume of 50 gallons per broadcast acre to primocanes which have emerged 4 to 6 inches. Proper timing of the spray application is essential. Application to primocanes greater than 6 inches may result in unacceptable cane growth (bent canes). The highest use rate and/or additional applications may be required to achieve acceptable suppression of vigorous early season primocane growth. On shorter season plantings (in higher elevations) or plantings grown on light (sandy) textured soils, reduced rates may provide acceptable primocane suppression. Primocane suppression from LIBERTY OXYFLUORFEN 4L may last from 3 to 6 weeks, therefore, timing, rate, and number of applications must be adjusted according to plant health and vigor and the desired length of primocane suppression. The addition of 2 pints of an 80% active nonionic surfactant cleared for application to growing crops) per 100 gallons of spray solution is advised.
Raspberry	0.38 – 1.5 (0.19 – 0.38 lb ai)	

Precautions:

- Occasionally, after the use of this product, a spotting, crinkling or flecking may appear on the leaves of the fruiting canes. Some blackberry varieties may be more sensitive than others. This is to be expected and does not affect performance or yield. Leaves of the fruiting canes which receive direct or indirect (drift) spray contact will be injured.

Restriction:

- **DO NOT** use this product on blackberry plantings which are weak or under stress, due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture, as primocane growth may be insufficient for the following year's crop.

Crop-Specific Restrictions:

- **Chemigation: DO NOT** apply this product through any type of irrigation system.
- This product must be applied only by ground application equipment.
- This product is phytotoxic to plant foliage. Avoid accidental spray contact or drift with established crops
- **DO NOT** apply when weather conditions favor drift to non-target areas.
- **DO NOT** treat ditch banks or waterways with this product or contaminate water used for irrigation

or domestic purposes.

- **Retreatment Interval:** 8 weeks

Blackberry

- **DO NOT** apply more than 1.6 pints (0.8 lb ai) per broadcast acre per application.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per broadcast acre per year.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **Preharvest Interval (PHI):** 15 days

Raspberry

- **DO NOT** apply more than 1.5 pints (0.75 lb ai) per broadcast acre per application.
- **DO NOT** apply more than 2.5 pints (1.25 lb ai) per broadcast acre per year.
- **DO NOT** make more than 2 applications per year when using reduced application rates.
- **Preharvest Interval (PHI):** 50 days

*Dosages listed are for broadcast application. See Ground Application section of this label for conversion to band application rates.

**BLACKBERRY PRIMOCANE SUPPRESSION DURING
NONBEARING YEAR OF ALTERNATE YEAR BLACKBERRY PRODUCTION
(For Use Only in Oregon)**

Crop	Rate (pt/acre)*	Specific Use Directions
Blackberry	0.5 - 1 (0.25 – 0.5 lb ai)	Apply LIBERTY OXYFLUORFEN 4L to the unwanted vegetative growth at the base of the blackberry plants. The addition of 2 pints of an 80% active nonionic surfactant cleared for application to growing crops) per 100 gallons of spray solution is advised. LIBERTY OXYFLUORFEN 4L must be applied after a sufficient number of canes have been bundled and trained to the trellis wire. The first application is made when the primocanes to be saved have reached either the bottom wire or approximately 4 feet in length (typically early to mid-June). LIBERTY OXYFLUORFEN 4L must be directed to the lower portion of the canes to reduce unwanted lateral growth and excessive foliage that normally develops at the base of each plant. The primocanes to be saved must be trained at an adequate height above the directed spray. A second application (typically mid-June to mid-September after the primocanes are trellised and wrapped on wire) may be applied to suppress new growth, leaves and lateral spurs that develop at the base of the plant. Application timing will vary according to location and vigor of planting. Spray coverage is essential for optimum activity on unwanted vegetation. LIBERTY OXYFLUORFEN 4L must be applied at a minimum of 30 gallons of water per broadcast acre in a 3-foot band directed towards the lower portion of the blackberry canes in the primocane row. Use a low-pressure spray system (suggested 30 to 60 psi). Mounted nozzles are to be used to deliver the spray solution. Spray equipment must be calibrated carefully before each use.

Precautions:

- Occasionally, after the use of this product, a spotting, crinkling or flecking may appear on the leaves of the vegetative canes. This is to be expected and does not affect plant health, performance or yield. Leaves of the vegetative canes that receive direct or indirect (drift) spray

contact will be injured.

Crop-Specific Restrictions:

- **Chemigation: DO NOT** apply this product through any type of irrigation system.
- This product must be applied only by ground application equipment.
- This product is phytotoxic to plant foliage. Avoid accidental spray contact or drift with established crops. **DO NOT** apply when weather conditions favor drift to non-target areas.
- **DO NOT** apply more than 2 pints (1.0 lb ai) per broadcast acre per application.
- **DO NOT** apply more than 4 pints (2.0 lb ai) per broadcast acre per year.
- **DO NOT** make more than 2 applications per acre per year.
- **Retreatment Interval:** 8 weeks
- For application only during the nonbearing year of blackberries grown using Alternate Year (AY) management system.
- **DO NOT** apply this product to blackberries during the bearing season.
- **DO NOT** use this product on blackberry plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.

*Dosages listed are for broadcast application. See Ground Application section of this label for conversion to band application rates.

BROCCOLI / CABBAGE / CAULIFLOWER

Pre-Transplant (Preplant) Application for Preemergence Broadleaf Weed Control

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	0.5 – 1 (0.25 – 0.5 lb ai)	<p>Pre-Transplant Application Only: Apply broadcast to final seedbed prior to transplanting. Use lower rate in the rate range on coarse-textured soils with less than 1% organic matter. Use the highest rate in the rate range on medium-to fine-textured soils or soils containing greater than 1% organic matter.</p> <p>Transplanting must be accomplished with minimal soil disturbance and soil left undisturbed during the time weed control is desired.</p>

Precautions:

- Pre-transplant applications may result in initial, but temporary, crop injury (leaf cupping or crinkling) and is enhanced if crop leaves come in direct contact with treated soil. Crop will rapidly outgrow this condition and develop normally. Severe crop injury may result if transplants are under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides or storage conditions. The use of transplants less than 5 weeks old or use of extremely succulent transplants grown in containers less than 1 inch square may increase the severity of crop injury. Hardening off, increasing the age of transplants or increasing the size of the rooting containers will lessen the possibility and/or severity of potential crop injury.
- LIBERTY OXYFLUORFEN 4L will assist in early season annual grass control, however, a herbicide program for preemergence or postemergence control of annual grasses is advised.
- Applications to muck soils may result in partial weed control or suppression.
- Furrow and drip irrigation immediately after transplanting and under high temperatures can result in increased crop injury. Sprinkler irrigation is advised during early establishment of transplants. If these conditions cannot be met, LIBERTY OXYFLUORFEN 4L must not be used.

Crop-Specific Restrictions:

- **DO NOT** apply more than 1 pint (0.5 lb ai) broadcast per acre per application.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
- **DO NOT** make more than 1 application per acre per year.
- **DO NOT** apply this product if an acetanilide herbicide including S-metolachlor or alachlor has been applied to the field during the current growing season as severe crop injury may occur.
- **DO NOT** apply this product as a preemergence treatment to direct-seeded broccoli, cabbage or cauliflower.
- **DO NOT** apply this product post-transplant or over-the-top of broccoli, cabbage or cauliflower.

Key Weeds Controlled:

Preemergence	
Carpetweed Pigweed, Redroot	Purslane, Common Smartweed, Pennsylvania

BROCCOLI / CAULIFLOWER / CABBAGE
Postemergence Application
(For Use Only in Arizona, Michigan and New York)

Weed Control	Rate (pt/acre)	Specific Use Directions
Postemergence	0.25 – 0.375 (0.125 – 0.188 lb ai)	Apply LIBERTY OXYFLUORFEN 4L as a broadcast or directed spray for the postemergence suppression/control of susceptible broadleaf weed species in direct-seeded or transplanted broccoli, cauliflower cabbage. Apply LIBERTY OXYFLUORFEN 4L as a broadcast postemergence application at the rate of 4 to 6 fluid ounces (0.125-0.188 lb ai) per acre. LIBERTY OXYFLUORFEN 4L can also be applied as a directed application at a rate of 4 to 8 fluid ounces (0.125-0.25 lb ai) per acre. Directed applications are those where spray mixtures are applied in such a way as to minimize contact to crop leaves, directing the spray toward the soil at the base of the crop. For direct-seeded crops, apply when the crop reaches a minimum of four true leaves. For transplanted crops, apply after a minimum of two weeks after planting.
Directed spray	0.25 – 0.5 (0.125 – 0.25 lb ai)	

Precautions:

- Apply only with ground equipment in a spray volume of 20 gallons or more of water per acre. Increase the spray volume to ensure complete and uniform coverage as weed height and density increases. Use a low-pressure sprayer equipped with flat fan nozzles operated at the manufacturer's specified pressure.

Crop-Specific Restrictions:

- For direct-seeded crops, **DO NOT** apply more the 8 fluid ounces (0.25 lb ai) per acre per crop as a post emergence treatment.
- For transplanted crops, **DO NOT** apply more than 8 fluid ounces (0.25 lb ai) per acre per crop as a post-transplant treatment per year.
- If a pre-transplant (preplant) treatment has previously been made, the combination of pre- plus post-transplant treatments must not exceed 16 fluid ounces (0.5 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per crop per year.
- **DO NOT** add any adjuvant or liquid fertilizer to the spray mixture.
- For postemergence use in broccoli and cauliflower, **DO NOT** mix LIBERTY OXYFLUORFEN 4L

with adjuvants (oils, surfactants), liquid fertilizer, or pesticides.

- **Preharvest Interval (PHI):** 35 days
- **DO NOT** apply when weather conditions favor drift. Avoid drift to all nontarget areas. LIBERTY OXYFLUORFEN 4L is phytotoxic to susceptible plant foliage. **DO NOT** apply through any type of irrigation equipment in these states.

Crop Resistance Information

Broccoli, cauliflower and cabbage are tolerant to postemergence applications of LIBERTY OXYFLUORFEN 4L; however, under certain conditions, LIBERTY OXYFLUORFEN 4L can cause severe crop injury. Application to crops grown under very mild (cool, cloudy) conditions can produce leaf cupping, crinkling, stunting, or necrotic lesions. When injury occurs, it is usually limited to the treated leaves with new leaves emerging undamaged. Delay in crop development and/or maturity and yield reduction can result under these conditions. **DO NOT** use LIBERTY OXYFLUORFEN 4L on plants that are weakened or are under stress due to temperature, disease, fertilizer, soil salts, nematodes, insects, pesticides, drought, excessive moisture, flooding, or soil crusting.

Weeds Controlled or Suppressed Postemergence

LIBERTY OXYFLUORFEN 4L provides postemergence control/suppression of the following weeds when used at specified dosages:

Common Name	Scientific Name
Cheeseweed (Malva)	<i>Malva parviflora</i>
Nettle, Burning	<i>Urtica urens</i>
Nightshade, Black	<i>Solanum nigrum</i>
Pigweed, Redroot	<i>Amaranthus retroflex us</i>
Purslane, Common	<i>Portulaca oleracea</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Sowthistle, Annual	<i>Sonchus oleraceus</i>

Cultural Considerations

For best weed control results, apply LIBERTY OXYFLUORFEN 4L to young (1-4 leaf), actively growing weeds.

**BROCCOLI/CAULIFLOWER
Postemergence Application
(For Use Only in California)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Postemergence	0.25 – 0.375 (0.125 – 0.188 lb ai)	Apply LIBERTY OXYFLUORFEN 4L as a broadcast or directed spray for the postemergence suppression/control of susceptible broadleaf weed species in direct-seeded or transplanted broccoli and cauliflower.
Directed Spray	0.25 – 0.5 (0.125 – 0.25 lb ai)	Apply LIBERTY OXYFLUORFEN 4L as a broadcast postemergence application at the rate of 4 to 6 fluid ounces (0.125-0.188 lb ai) per acre. LIBERTY OXYFLUORFEN 4L can also be applied as a directed application at a rate of 4 to 8 fluid ounces (0.125-0.25 lb ai) per acre. Directed applications are those where spray mixtures are applied in such a way as to minimize contact to crop leaves, directing the spray toward the soil at the base of the crop.
For direct-seeded crops, apply when the crop reaches		

		a minimum of four true leaves. For transplanted crops, apply after a minimum of two weeks after planting.
Precautions:		
<ul style="list-style-type: none"> • Apply only with ground equipment in a spray volume of 20 gallons or more of water per acre. Increase the spray volume to ensure complete and uniform coverage as weed height and density increases. Use a low-pressure sprayer equipped with flat fan nozzles operated at the manufacturer's specified pressure. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • For direct-seeded crops, DO NOT apply more than 8 fluid ounces (0.25 lb ai) per acre per crop as a post emergence treatment. • For transplanted crops, DO NOT apply more than 8 fluid ounces (0.25 lb ai) per acre per crop as a post-transplant treatment per year. • If a pre-transplant (preplant) treatment has previously been made, the combination of pre- plus post-transplant treatments must not exceed 16 fluid ounces (0.5 lb ai) per acre per year. • DO NOT make more than 2 application per crop per year. • DO NOT add any adjuvant or liquid fertilizer to the spray mixture. • For postemergence use in broccoli and cauliflower, DO NOT mix this product with adjuvants (oils, surfactants), liquid fertilizer, or pesticides. • Preharvest Interval (PHI): 35 days • DO NOT apply when weather conditions favor drift. Avoid drift to all nontarget areas. This product is phytotoxic to susceptible plant foliage. 		

Crop Resistance Information

Broccoli and cauliflower are tolerant to postemergence applications of LIBERTY OXYFLUORFEN 4L; however, under certain conditions, LIBERTY OXYFLUORFEN 4L can cause severe crop injury. Application to crops grown under very mild (cool, cloudy) conditions can produce leaf cupping, crinkling, stunting, or necrotic lesions. When injury occurs, it is usually limited to the treated leaves with new leaves emerging undamaged. Delay in crop development and/or maturity and yield reduction can result under these conditions. **DO NOT** use LIBERTY OXYFLUORFEN 4L on plants that are weakened or are under stress due to temperature, disease, fertilizer, soil salts, nematodes, insects, pesticides, drought, excessive moisture, flooding, or soil crusting.

Weeds Controlled or Suppressed Postemergence

LIBERTY OXYFLUORFEN 4L provides postemergence control/suppression of the following weeds when used at specified dosages.

Common Name	Scientific Name
Cheeseweed (Malva)	<i>Malva parviflora</i>
Nettle, Burning	<i>Urtica urens</i>
Nightshade, Black	<i>Solanum nigrum</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Purslane, Common	<i>Portulaca oleracea</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Sowthistle, Annual	<i>Sonchus oleraceus</i>

Cultural Considerations

For best weed control results, apply when LIBERTY OXYFLUORFEN 4L to young (1-4 leaf), actively growing weeds.

CACAO (BEARING AND NONBEARING) (For Use Only in Hawaii)

LIBERTY OXYFLUORFEN 4L may be applied as a pre-transplant treatment or to established or recently transplanted cacao.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	1 – 4 (0.5 – 2.0 lb ai)	Pre-transplant Application: Up to 2 pints (1.0 lb ai) per broadcast acre may be applied as a pre-transplant application. Application to Established Plantings: In established plantings, including recently transplanted cacao plants, apply as a directed spray to the orchard floor. Use higher rates in rate range and increase spray volume to control dense growth of existing weeds or for extended residual preemergence weed control.
Precautions:		
<ul style="list-style-type: none"> This product must be applied to only healthy growing trees/transplants of suitable size to allow directed sprays. Avoid spray contact with foliage. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> DO NOT apply preplant or preemergence to direct-seeded cacao. DO NOT apply more than 4 pints (2.0 lb ai) per acre per application. DO NOT apply more than 12 pints (6.0 lb ai) per acre per year. DO NOT make more than 4 application per acre per year when using reduced application rates. Retreatment Interval: 10 weeks Preharvest Interval (PHI): 1 day 		

Key Weeds Controlled:

Preemergence	Postemergence
Ageratum Buttonweed Crotalaria Purslane, Common Spurge, Garden	Purslane, Common Spurge, Garden

CITRUS (NONBEARING)

Citrus, including Calamondin, Chironja, Citrus Citron, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Pummelo, Satsuma Mandarin, Sour Orange, Sweet Orange, Tangelo, Tangerine, Tangor

LIBERTY OXYFLUORFEN 4L may be applied only in non-bearing citrus orchards. Apply only as a directed spray to the orchard floor avoiding contact with citrus foliage.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	3 (1.5 lb ai)	Preemergence Weed Control: Up to 3 pints (1.5 lb ai) per acre may be applied for residual preemergence weed control. Postemergence Weed Control: The 3 pints (1.5 lb ai) per acre rate will control weeds up to 4 inches tall. Weeds greater than 4-leaf or 4 inches tall may be partially controlled. Use sufficient spray volume for complete and uniform coverage of weeds. Increase the spray volume with increased weed height and density to ensure complete coverage.
Postemergence	1 – 3 (0.5 – 1.5 lb ai)	
Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions.		
<ul style="list-style-type: none"> Preemergence Use: For residual control of grass weeds, this product may be tank mixed with grass herbicides labeled for use in citrus. Postemergence Use: For broader spectrum postemergence control of emerged grass and broadleaf weeds, this product may be tank mixed with paraquat or glyphosate. 		

Crop-Specific Restrictions:

- Apply this product only to nonbearing citrus (trees that will not bear fruit for one year).
- **DO NOT** apply during periods of new citrus foliage growth. Applications must be made after foliage has fully expanded and hardened off. Avoid direct spray contact with citrus foliage.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per application.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per year.
- **DO NOT** make more than 3 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 8 weeks
- **Preharvest Interval (PHI):** 365 days

(Arizona and California)		(Florida, Louisiana and Texas)	
Preemergence	Postemergence	Preemergence	Postemergence
burclover cheeseweed (malva) fiddleneck, coast filaree, broadleaf filaree, redstem filaree, whitestem groundsel, common henbit knotweed, prostrate lambsquarters, common lettuce, prickly pigweed, red root purslane, common redmaids rocket, London shepherdspurse sowthistle, annual spurge, prostrate spurge, spotted	cheeseweed (malva) fiddleneck, coast filaree, broadleaf* filaree, redstem* filaree, whitestem* groundsel, common henbit minerslettuce nettle, burning pigweed, red root redmaids shepherdspurse sowthistle, annual	cudweed, narrowleaf eveningprimrose, cutleaf** groundcherry, cutleaf lambsquarters, common nightshade, American black nightshade, black pepperweed, Virginia pigweed, red root poinsettia, wild pusley, Florida sida, prickly (teaweed) smartweed, Pennsylvania sowthistle, annual spurge, prostrate spurge, spotted	balsamapple cudweed, narrowleaf*** eveningprimrose, cutleaf** groundcherry, cutleaf groundcherry, Wright lambsquarters, common morningglory, annual nightshade, American black nightshade, black pepperweed, Virginia pigweed, redroot poinsettia, wild purslane, common pusley, Florida sida, prickly (teaweed) smartweed, Pennsylvania sowthistle, annual
<p>* This product at the 3 pints (1.5 lb ai) per acre will provide control of filaree and other weeds up to 4-inch stage. Applications to weeds beyond the 4-inch stage may result in partial control.</p> <p>** Highest rate and/or multiple applications may be required for acceptable control.</p> <p>*** Maximum 0.5-inch diameter.</p>			

**COFFEE (BEARING AND NONBEARING)
(For Use Only in Hawaii)**

LIBERTY OXYFLUORFEN 4L may be applied to established coffee, recently transplanted coffee, or as a pre-transplant treatment. In established non-dormant coffee, apply as a directed spray avoiding contact with crop foliage. Newly established transplants must be healthy and well established and of sufficient size to allow use of directed sprays without contacting crop foliage.

LIBERTY OXYFLUORFEN 4L may be applied over-the-top of dormant coffee transplants. Transplants are considered to be dormant when active terminal growth has ceased and terminal buds have formed. Application over-the top of coffee plants after buds start to swell (a sign that new growth has resumed) may result in crop injury.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	1 – 4 (0.5 – 2.0 lb ai)	Preemergence Weed Control: • Apply as a directed spray to the orchard floor

		beneath established coffee plants. <ul style="list-style-type: none"> Up to 2 pints (1 lb ai) per acre may be applied as a pre-transplant application prior to transplanting coffee plants. Postemergence Weed Control: Increase the spray volume when weed growth is dense or trash is present; or use a higher rate within the rate range for extended residual preemergence weed control.
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Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. Apply tank mixes only as directed sprays.

Crop-Specific Restrictions:

- To prevent foliar injury, **DO NOT** apply during periods of rapid new growth or allow spray or drift to contact actively growing foliage.
- DO NOT** apply preplant or preemergence to direct-seeded coffee.
- DO NOT** apply more than 4 pints (2.0 lb ai) per broadcast acre per application.
- DO NOT** apply more than 12 pints of LIBERTY OXYFLUORFEN 4L (6.0 lb ai) per broadcast acre per year.
- DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- Retreatment Interval:** 10 weeks
- Preharvest Interval (PHI):** 1 day

Key Weeds Controlled:

Preemergence	Postemergence
Ageratum Buttonweed Crotalaria Purslane, Common Spurge, Garden	Purslane, Common Spurge, Garden

CONIFER SEEDBEDS, TRANSPLANTS, CONTAINER STOCK AND SELECTED FIELD-GROWN DECIDUOUS TREES

Key Weeds Controlled: When LIBERTY OXYFLUORFEN 4L is applied preemergence or postemergence at specified dosages and weed stages.

Barnyardgrass ¹	mustard, blue
bedstraw, catchweed	mustard, tumble
bittercress, lesser	mustard, wild
bluegrass, annual ¹	nettle, burning
buckwheat, wild	nightshade, black
burclover	nightshade, hairy
carpetweed	oats, wild
clover, red ¹	orach, red
clover, white ¹	pepperweed, yellowflower
cocklebur, common	pigweed, prostrate
crabgrass, large ¹	pigweed, red root
fiddleneck, coast ¹	pimpernel, scarlet
filaree, broadleaf	purslane, common
filaree, redstem	redmaids
fireweed (from seed)	rocket, London
flixweed	sandspurry, red
foxtail, giant ¹	Shepherdspurse ¹
Goosegrass ¹	sida, prickly
groundcherry, cutleaf	smartweed, Pennsylvania
groundcherry, Wright	sorrel, red (from seed)

groundsel, common	sowthistle, annual
henbit	speedwell, birdseye
jimsonweed	spurge, prostrate ²
knotweed, prostrate	spurge, spotted ²
ladysthumb	spurry, corn
lambsquarters, common	tansymustard
lettuce, prickly	thistle, bull ²
mallow, little	thistle, Russian
mayweed	velvetleaf
minerslettuce	witchgrass
morningglory, ivyleaf ¹	woodsorrel, yellow ²
morningglory, tall ¹	
¹ Highest rate and/or multiple applications may be required for acceptable control.	
² Preemergence control only.	

CONIFER SEEDBEDS

LIBERTY OXYFLUORFEN 4L provides both postemergence and residual preemergence control of many broadleaf weeds and annual grass species.

Seeded conifers are tolerant to preemergence and postemergence applications of LIBERTY OXYFLUORFEN 4L. For weed control during the establishment of conifer seedlings, LIBERTY OXYFLUORFEN 4L can be applied after seeding of conifers, but prior to emergence. For weed control in emerged conifers, LIBERTY OXYFLUORFEN 4L may be applied over-the-top, but application must be delayed a minimum of 5 weeks after seedling emergence. If application is made during cool, cloudy weather, make certain that seedlings have hardened-off prior to spraying.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	0.5 – 2 (0.25 – 1.0 lb ai)	Application after planting, but prior to emergence of conifer seedlings: Where grass weeds are present, apply 1 to 2 pints (0.5 – 1.0 lb ai) of LIBERTY OXYFLUORFEN 4L per acre. In known areas of high weed competition, apply 2 pints (1.0 lb ai) of LIBERTY OXYFLUORFEN 4L per acre. Broadcast to beds and irrigate with 1/2 to 3/4 inch of sprinkler irrigation before weed emergence. LIBERTY OXYFLUORFEN 4L is most effective on annual grasses when applied preemergence.
Postemergence	0.5 – 1 (0.25 - 0.5 lb ai)	Application after emergence of conifer seedlings: Application must be made to seedling weeds less than 4 inches in height (seedling grasses not exceeding the 2-leaf stage). Depending on subsequent weed flushes, multiple applications may be necessary to achieve season-long weed control.
Chemigation: LIBERTY OXYFLUORFEN 4L may be applied at labeled rates through sprinkler irrigation systems. For center pivot irrigation systems, apply the specified dosage of this product per acre metered at a continuous uniform rate during the entire irrigation period, otherwise meter LIBERTY OXYFLUORFEN 4L at a continuous uniform rate during the middle 1/3 of the irrigation period. When applying by sprinkler irrigation, follow directions given in the Chemigation Instructions section of this label.		
Precautions:		
<ul style="list-style-type: none"> Occasionally spotting, crinkling, or flecking may appear on leaves of conifers. Leaves that receive direct spray or drift may be injured, but typically outgrow this condition rapidly and develop normally. Apply this product only to healthy conifer stock. 		

- **DO NOT** apply this product in an enclosed greenhouse structure as injury to plant foliage may result.

Crop-Specific Restrictions:

- **DO NOT** apply more than 2 pints (1.0 lb ai) per acre per application.
- **DO NOT** apply more than 4 pints (2.0 lb ai) per acre per year.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 8 weeks
- **DO NOT** store or transport treated container stock in an enclosed structure until completion of 4 irrigations (minimum 21 days) as injury to non-labeled plants may occur.
- **DO NOT** apply this product to conifers that are under stress from excessive fertilizer or soil salts, disease, nematodes, frost, drought, flooding, previously-applied pesticides, soil insects, or winter injury, as severe injury may result.
- **DO NOT** graze or harvest livestock forage from treated areas.

LIBERTY OXYFLUORFEN 4L may be applied to conifer seedbeds of the following species:

Important: When applied as directed, the conifer species listed on this label have shown resistance to LIBERTY OXYFLUORFEN 4L. It is impossible, however, to evaluate this product on all varieties, biotypes and cultivars of listed species under all possible growing conditions. Until familiar with results under local growing conditions, the user must exercise reasonable judgment and caution with this product. Limit application of this product to a few plants in a small area to determine plant resistance and extent of injury if such occurs, prior to initiating large-scale applications.

Douglas Fir	<i>Pseudotsuga menziesii</i>
Fir	Fraser (<i>Abies fraseri</i>) Grand (<i>Abies grandis</i>) Noble (<i>Abies procera</i>)
Hemlock	Eastern hemlock (<i>Tsuga canadensis</i>) Western hemlock (<i>Tsuga heterophylla</i>)
Pine	Austrian (<i>Pinus nigra</i>) Eastern White (<i>Pinus strobus</i>) Himalayan (<i>Pinus wallichiana</i>) Jack (<i>Pinus banksiana</i>) Loblolly (<i>Pinus taeda</i>) Lodgepole (<i>Pinus contorta</i>) Longleaf (<i>Pinus palustris</i>) Monterey (<i>Pinus radiata</i>) Mugho (<i>Pinus mugo</i>) Ponderosa (<i>Pinus ponderosa</i>) Scotch (<i>Pinus sylvestris</i>) Shortleaf (<i>Pinus echinata</i>) Slash (<i>Pinus elliotii</i>) Virginia (<i>Pinus virginiana</i>)
Spruce	Blue (<i>Picea pungens</i>) Dwarf (<i>Picea glauca Conica</i>) Norway[*] (<i>Picea abies</i>) Sitka[*] (<i>Picea sitchensis</i>)

**CONIFER TRANSPLANTS AND CONTAINER STOCK
(INCLUDES 2-0 SEEDLING AND CHRISTMAS TREE PLANTINGS)**

Many container-grown conifers and conifer transplants are resistant to preemergence and postemergence applications of LIBERTY OXYFLUORFEN 4L. Applied postemergence, LIBERTY OXYFLUORFEN 4L provides postemergence control of emerged weeds and preemergence residual control of many broadleaf weeds and grasses (see Key Weeds Controlled) at the beginning of this section.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 4 (1.0 – 2.0 lb ai)	Transplanted and Container Grown Conifers: For best results, preemergence applications must be made immediately after transplanting seedlings or to weed-free container stock. Postemergence applications must be made to weeds less than 4 inches in height. Two applications may be necessary, in fall-transplanted conifer fields, for season-long weed control. The addition of a non-ionic surfactant (0.25% v/v) labeled for application to growing crops, enhances the activity of LIBERTY OXYFLUORFEN 4L on emerged weeds.
Crop-Specific Restrictions: <ul style="list-style-type: none"> • DO NOT make over-the-top applications during periods of active conifer growth. Apply only before bud break or after new terminal growth has hardened off. • DO NOT apply more than 4 pints (2.0 lb ai) per acre per application. • DO NOT apply more than 8 pints (4.0 lb ai) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks • DO NOT graze or harvest livestock forage from treated areas 		

In addition to those conifer species listed under the Conifer Seedbed section, the following conifer species have been shown to be tolerant to LIBERTY OXYFLUORFEN 4L:

Arborvitae	<i>Thuja occidentalis</i> <i>Thuja orientalis</i>
Juniper	<i>Juniperus chinensis</i> <i>Juniperus horizontalis</i> <i>Juniperus procumbens</i> <i>Juniperus sabina</i> <i>Juniperus scopolorum</i>
Red cedar	<i>Juniperus viminiana</i>
Western hemlock	<i>Tsuga heterophylla</i>
Yew	<i>Taxus species</i>

SELECTED FIELD-GROWN DECIDUOUS TREES

Listed field-grown deciduous trees are tolerant only to directed spray applications of LIBERTY OXYFLUORFEN 4L. LIBERTY OXYFLUORFEN 4L provides both preemergence and postemergence control of listed broadleaf weeds and grasses.

Timing to Crop: Apply LIBERTY OXYFLUORFEN 4L to established deciduous trees or after transplanting. For optimum weed control, applications must be made prior to weed germination. Apply only as a directed spray to soil beneath the trees.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Early postemergence	1 – 3 (0.5 – 1.5 lb ai)	LIBERTY OXYFLUORFEN 4L may be applied to established deciduous trees or after transplanting as a single or split application. Apply as a directed spray to the soil surface. Use spray shields to reduce exposure of foliage and bark. The addition of a non-ionic surfactant (0.25% v/v) labeled for application to growing crops, will enhance herbicidal

		activity on emerged weeds. Spot Application: Spot treatments at specified rates may be used to control localized weed infestations. See use directions for Spot Application in the APPLICATION METHODS AND CULTURAL PRACTICES section.
Tank Mixing: For broader spectrum control, LIBERTY OXYFLUORFEN 4L may be tank mixed with other preemergence or postemergence herbicides registered for this use in deciduous trees. Refer to MIXING DIRECTIONS section for Tank Mixing Precautions.		
Precautions:		
<ul style="list-style-type: none"> For maximum crop safety, directed applications must be made prior to budbreak in the spring or after trees have initiated dormancy in the fall. Avoid contact of spray or drift with foliage or stems with green bark. Application after bud swell may result in crop injury. If a non-dormant application is required due to weed competition, apply only after foliage has fully expanded and hardened off. Use only directed sprays and spray shields to prevent spray contact with stems with green bark or foliage. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> DO NOT apply this product to trees that have been weakened or are under stress from excessive fertilizer or soil salts, disease, nematodes, frost, wind injury, drought, flooding, previously-applied pesticides, insects, or winter injury as severe injury may result. DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. DO NOT apply more than 3 pints (1.5 lb ai) per acre per year. DO NOT make more than 3 applications per acre per year when using reduced application rates. Retreatment Interval: 8 weeks DO NOT apply to bearing tree fruit, nut and vine crops. For selected bearing tree fruit, nut and vine crops, refer to Tree Fruit/Nut/Vine section of this label for use directions. DO NOT graze or feed livestock forage cut from areas treated with this product. 		

LIBERTY OXYFLUORFEN 4L may be applied to the following deciduous tree species:

Almond ²	<i>Prunus spp.</i>
Apple ²	<i>Malus X domestica</i>
Apricot ²	<i>Prunus spp.</i>
Ash, Green	<i>Fraxinus pennsylvanica</i>
Ash, White	<i>Fraxinus americana</i>
Birch, River	<i>Betula nigra</i>
Cherry ²	<i>Prunus spp.</i>
Chestnut ²	<i>Castanea spp.</i>
Crabapple ²	<i>Malus spp.</i>
Cottonwood	<i>Populus spp.</i>
Dogwood	<i>Cornus florida</i>
Eucalyptus	<i>Eucalyptus viminalis</i> <i>Eucalyptus pulverulenta</i> <i>Eucalyptus camaldulensis</i>
Filbert ²	<i>Corylus spp.</i>
Lilac	<i>Syringa vulgaris</i>
Locust, Black	<i>Robinia pseudoacacia</i>
Maple, Black ¹	<i>Acer nigrum</i>
Maple, Red ¹	<i>Acer rubrum</i>
Maple, Sugar ¹	<i>Acer saccharum</i>
Myrtle, Crepe	<i>Lagerstroemia indica</i>
Nectarine ²	<i>Prunus spp.</i>
Nut, Hickory ²	<i>Carya spp.</i>

Nut, Macadamia	<i>Macadamia ternifolia</i>
Oak, Chestnut	<i>Quercus prinus</i>
Oak, Cherrybark	<i>Quercus pagoda</i>
Oak, Nuttall	<i>Quercus nuttallii</i>
Oak, Pin	<i>Quercus palustris</i>
Oak, Red	<i>Quercus rubra</i>
Oak, Water	<i>Quercus nigra</i>
Oak, Willow	<i>Quercus phellos</i>
Olive, Russian	<i>Elaeagnus angustifolia</i>
Poplar	<i>Populus</i> spp.
Poplar, Tulip	<i>Liriodendron tulipifera</i>
Peach ²	<i>Prunus persica</i>
Pear ²	<i>Pyrus</i> spp.
Pecan ²	<i>Carya</i> spp.
Pistachio ²	<i>Pistacia vera</i>
Plum ²	<i>Prunus</i> spp.
Prune ²	<i>Prunus</i> spp.
Redbud	<i>Cercis canadensis</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Platanus occidentalis</i>
Walnut, Black ²	<i>Juglans nigra</i>
¹ DO NOT apply to maple trees used for production of maple sap or maple syrup. ² Apply only to nonbearing trees. For bearing tree fruit, nut and vine crops, refer to specific use directions in the Tree fruit/Nut/Vine section of this label.	

CORN

For Use Only on Field Corn in Conjunction with the USDA Witchweed Eradication Program in North Carolina and South Carolina

Apply LIBERTY OXYFLUORFEN 4L only as a directed spray from May through August for preemergence and postemergence control of witchweed (*Striga asiatica*). Corn must be a minimum of 24 inches tall. Examine witchweed infested fields during the early part of the growing season to determine uniformity of corn stand and grass weed pressure. If necessary, cultivate weed-infested fields prior to initial application of LIBERTY OXYFLUORFEN 4L to allow for optimum soil coverage during the initial application. Fields treated with LIBERTY OXYFLUORFEN 4L must be inspected regularly for any breakthrough of witchweed. If breakthrough occurs, a second application must be made as soon as possible after appearance of witchweed. Repeat treatments must occur prior to bloom stage to prevent seed set.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1 – 1.5 (0.5 – 0.75 lb ai)	Initial Application: Apply as a directed spray over the entire row surface at the rate of 1 pint (0.5 lb ai) per acre. Use up to 3 pints (1.5 lb ai) per acre in areas of heavy witchweed infestation. Use a minimum spray volume of 20 gallons per acre and a non-ionic surfactant at the rate of 2 pints (1 lb ai) per 100 gallons of spray.
Postemergence	0.5 – 1 (0.25 – 0.5 lb ai)	Repeat Applications: In case of witchweed breakthrough a repeat application may be made at 0.5 to 1 pint (0.25 – 0.5 lb ai) per acre.
Crop-Specific Restrictions: <ul style="list-style-type: none"> DO NOT spray over the top of the corn, as this may result in severe corn injury. Spray must contact only the lower 3 to 8 inches of the corn stalk and any leaves in this zone. Spray droplets contacting the lower leaves will cause necrotic spotting or streaking of sprayed tissue. 		

- **DO NOT** apply more than 1.5 pints (0.75 lb ai) per acre per application.
- **DO NOT** apply more than 2.5 pints (1.25 lb ai) per acre per year.
- **DO NOT** make more than 3 applications per acre per year when using reduced application rates.
- **Retreatment interval:** 10 weeks
- **Preharvest Interval (PHI):** 60 days
- **DO NOT** use corn plants from a treated field for green chop, ensilage, forage, or fodder.

COTTON

Application Methods and Equipment: LIBERTY OXYFLUORFEN 4L may be applied as a post-direct spray to cotton a minimum of 6 to 8 inches tall. Care must be exercised to avoid spray contact with the cotton leaves. Use rigid precision ground spray equipment and spray shields to prevent spray contact with cotton foliage. Use branch lifters or shields, as necessary, to avoid contact of directed sprays with cotton plant.

Accurate placement of spray nozzles is essential for uniform coverage of weeds and to minimize injury to cotton plants. Use a minimum broadcast spray volume of 20 gallons per acre and operate the sprayer at the minimum spray pressure listed by the spray nozzle manufacturer. LIBERTY OXYFLUORFEN 4L may be applied as a post-directed spray with only 2 flat fan nozzles per row (1 nozzle on each side of the row). For optimum coverage, use 4 flat fan nozzles per row (2 nozzles on each side of the row). The 2 forward nozzles must point forward and downward while the rear nozzles must point to the rear and downward. With either sprayer setup, nozzles must be carefully adjusted to cover the weed foliage with minimum contact to cotton plants. LIBERTY OXYFLUORFEN 4L may also be applied as a banded application. DO NOT use hollow cone nozzles.

Tank Mixing: For control of additional broadleaf and grass weeds, LIBERTY OXYFLUORFEN 4L may be applied as a postemergence directed spray in tank mix combination with other herbicides registered for postemergence use in cotton (see Tank Mixing Precautions under Mixing Directions).

Weed Control	Rate (pt/acre)	Specific Use Directions
Postemergence	0.5 – 1 (0.25 – 0.5 lb ai)	Apply as a post-directed spray. For optimum control, use the 1 pint (0.5 lb ai) per acre rate on actively growing weed seedlings with no more than 4 true leaves (not counting cotyledon leaves). Effective control of succulent weeds at the 2- to 3-leaf stage can usually be obtained at the 0.5 pint (0.25 lb ai) per acre rate. See Mixing Directions for surfactant specifications. Where available, irrigation may be applied prior to application of LIBERTY OXYFLUORFEN 4L to encourage maximum weed emergence. Irrigation following application will improve preemergence activity of LIBERTY OXYFLUORFEN 4L against nightshade and groundcherry species.
Precautions:		
<ul style="list-style-type: none"> • Exercise care to avoid spray contact with cotton leaves. Leaves accidentally sprayed will exhibit necrotic (dead) spots and may be dropped from the plant. Crop injury may be enhanced if application is made when excessive soil moisture is present or rainfall occurs immediately after application; however, cotton will outgrow this condition and develop normally. 		
Crop-Specific Restrictions:		
Western Cotton (AZ and CA):		
<ul style="list-style-type: none"> • DO NOT apply more than 1 pint (0.5 lb ai) per acre per application. • DO NOT apply more than 2 pints (1.0 lb ai) per broadcast acre per year. • DO NOT make more than 2 application per acre per year. 		

- **Retreatment Interval:** 10 weeks
 - **Preharvest Interval (PHI):** 75 days
 - **DO NOT** apply to cotton less than 6 inches tall or severe crop injury will result.
- Southern Cotton (All other states):**
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per application.
 - **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
 - **DO NOT** make more than 2 application per acre per year when using reduced application rates.
 - **Retreatment interval:** 10 weeks
 - **Preharvest Interval (PHI):** 90 days
 - **DO NOT** apply to cotton less than 6 inches tall or severe crop injury will result.

Key Weeds Controlled:

Postemergence	
Cocklebur, Common Croton, Tropic Groundcherry, Cutleaf Groundcherry, Wright Jimsonweed Lambsquarters, Common Morningglory, Annual (Up To 6 Leaf) Nightshade, American Black Nightshade, Black	Nightshade, Hairy Pigweed, Redroot Poinsettia, Wild ¹ Purslane, Common Sesbania, Hemp Sicklepod ² Sida, Prickly (Teaweed) ¹ Smartweed, Pennsylvania Velvetleaf
¹ Multiple applications may be required for acceptable control. ² Post-direct applications of this product will control or suppress seedlings not exceeding the one true leaf stage.	

COTTONWOOD

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 - 1.5 lb ai)	LIBERTY OXYFLUORFEN 4L may be applied as a single or split application. Apply as a directed spray to soil at the base of cottonwood trees. Use the higher rate in the rate range for extended preemergence weed control or for postemergence control of weeds up to the 6 leaf stage. The addition of a non-ionic surfactant at 2 pints per 100 gallons of spray will enhance the postemergence activity of LIBERTY OXYFLUORFEN 4L on emerged weeds.
<p>Precautions:</p> <ul style="list-style-type: none"> • Apply LIBERTY OXYFLUORFEN 4L immediately after transplant only to dormant healthy cottonwood stock. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • In established stands, DO NOT allow sprays of this product to contact cottonwood foliage. In newly established cottonwood plantings, use spray shields, if necessary, to prevent exposure of green bark and foliage. • DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. • DO NOT apply more than 9 pints (4.5 lb ai) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks 		

Key Weeds Controlled:

Groundsel, Common Knotweed, Prostrate Lambsquarters, Common	Mustard, Hedge Shepherdspurse Smartweed, Pennsylvania
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DECIDUOUS TREE PLANTINGS
(For Use Only in Louisiana and Mississippi)

LIBERTY OXYFLUORFEN 4L is an effective herbicide for preemergence and postemergence control of certain broadleaf weeds in deciduous tree plantings. In new plantings, over-the-top applications of LIBERTY OXYFLUORFEN 4L must be made soon after transplanting of dormant deciduous tree seedlings. Subsequent applications can be made to nondormant, fully foliated trees. Over-the-top applications to nondormant trees may result in minor discoloration and spotting of the foliage; however, trees will outgrow this condition. Leaves that are fully expanded and hardened off will exhibit less injury than newly emerged leaves or new bud growth. Applications to newly emerged leaves and/or new bud growth will result in leaf injury and is done at the user's risk.

Dosage: LIBERTY OXYFLUORFEN 4L may be applied at 1 to 4 pints (0.5 to 2 lb ai) per broadcast acre for preemergence and postemergence weed control. A maximum of 4 pints of LIBERTY OXYFLUORFEN 4L (2.0 lb ai) per acre per year may be applied as a result of single or multiple applications. The addition of 1 quart of LA TRG~ A G-98 or a comparable 80% active nonionic surfactant per 100 gallons of spray mix will assist in spray coverage and wetting of weeds for postemergence coverage.

Deciduous Species

Cottonwood, Eastern	<i>Populus deltoides</i>
Oak, Cherrybark	<i>Quercus pagoda</i>
Oak, Nuttall	<i>Quercus nuttallii</i>
Sweetgum	<i>Liquidambar styracifula</i>
Sycamore	<i>Platanus occidentalis</i>

Selected deciduous trees listed on this label have shown resistance to LIBERTY OXYFLUORFEN 4L. It is impossible however, to evaluate this product on all varieties, biotypes and cultivars of listed species on this label under all possible growing conditions. The user must exercise reasonable judgment and caution with this product. Until familiar with results under use growing conditions, limit application of this product to a small treated area to determine plant resistance and extent of injury if such occurs, prior to initiating large-scale applications.

Weeds Controlled: When LIBERTY OXYFLUORFEN 4L is applied preemergence or postemergence to weed seedlings (not exceeding 4- to 6-leaf stage) at specified dosages, the following broadleaf weeds are controlled:

Croton, Tropic Groundcherry, Cutleaf Groundcherry, Wright Groundsel, Common Jimsonweed Knowtweed, Prostrate Morningglory, Annual Mustard, Hedge Nightshade, American Black	Nightshade, Black Nightshade, Hairy Pigweed, Red Root Purslane, Common Sesbania, Hemp *Sida, Prickly (Tea Weed) Smartweed, Pennsylvania Velvetleaf
*Highest rate or multiple applications may be required for acceptable control.	

Timing and Method of Application: For optimum weed control, a dormant over-the-top application of LIBERTY OXYFLUORFEN 4L must be made prior to weed seedling emergence followed by a postemergence application after tree foliage have fully expanded. For weed management programs using only a single application per year, apply LIBERTY OXYFLUORFEN 4L preemergence.

LIBERTY OXYFLUORFEN 4L must be applied at 20 to 40 psi in a minimum of 20 gallons of water per acre depending upon density of emerged weeds. Spray volume must be increased as weed height and density increase. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment must be calibrated carefully before each use.

Mixing Directions: Fill the spray tank at least one-third full of clean water. With the pump and agitator running, add the specified amount of herbicide to the spray tank. Complete filling of the spray tank with water. Maintain agitation until spraying is complete.

EUCALYPTUS

Apply LIBERTY OXYFLUORFEN 4L for preemergence and postemergence control of listed broadleaf weeds in established eucalyptus plantings.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 - 1.5 lb ai)	<p>Directed Spray: LIBERTY OXYFLUORFEN 4L may be applied as a single or split application. Apply as a directed spray to soil at the base of eucalyptus trees.</p> <p>Use the higher rate in the rate range for extended preemergence weed control or for postemergence control of weeds up to the 6 leaf stage.</p> <p>The addition of a non-ionic surfactant at the rate of 2 pints per 100 gallons of spray will enhance the postemergence activity of LIBERTY OXYFLUORFEN 4L on emerged weeds.</p> <p>Over-the-Top Application: In new plantings, apply LIBERTY OXYFLUORFEN 4L just before or immediately after transplanting eucalyptus seedlings that are in a dormant condition (i.e., leaves may be present, but terminal growth has hardened off and terminal buds have formed). In established plantings, LIBERTY OXYFLUORFEN 4L may be applied as an over-the-top spray when plants are in a dormant condition.</p>
<p>Precautions:</p> <ul style="list-style-type: none"> • At transplant, apply this product only to "dormant" healthy eucalyptus stock. In established plantings, use spray shields, if needed, to prevent exposure of foliage and bark of small and/or actively growing plants. • To avoid phytotoxicity, make over-the-top applications only to eucalyptus trees in a dormant condition. DO NOT make over-the-top applications after bud break and resumption of active growth. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. • DO NOT apply more than 9 pints (4.5 lb ai) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks 		

Key Weeds Controlled:

Preemergence	Postemergence
Burclover	Cheeseweed (Malva)
Cheeseweed (Malva)	Fiddleneck, Coast
Fiddleneck, Coast	Filaree, Broad Leaf ¹
Filaree, Broad Leaf	Filaree, Redstem ¹
Filaree, Redstem	Filaree, Whitestem ¹
Filaree, Whitestem	Groundsel, Common

Groundsel, Common Henbit Knotweed, Prostrate Lambsquarters, Common Lettuce, Prickly Pigweed, Redroot Redmaids Rocket, London Shepherdspurse Sowthistle, Annual Spurge, Prostrate Spurge, Spotted	Henbit Minerslettuce Nettle, Burning Pigweed, Redroot Redmaids Shepherdspurse Sowthistle, Annual
¹ At the 3 pint (1.5 lb ai) rate, this product will provide control of filaree up to the 6-leaf stage.	

USE ON FALLOW BEDS

Not for use prior to planting soybeans in California

Used alone or in tank mix combination with glyphosate, LIBERTY OXYFLUORFEN 4L provides preemergence and/or postemergence control of winter annual broadleaf weeds on land to be planted to crops.

Prior to planting, treated fallow beds must be thoroughly tilled (incorporated) to a depth of at least 2.5 inches. LIBERTY OXYFLUORFEN 4L is no longer herbicidally effective once the active layer in the soil surface is disrupted by soil incorporation.

Aerial Application: LIBERTY OXYFLUORFEN 4L may be aerially applied for weed control in fallow beds. Follow requirements for Aerial Application in the Product Information section of this label.

Minimum Treatment to Planting Intervals for listed crops:

Direct-Seeded Crops	LIBERTY OXYFLUORFEN 4L (up to 0.5 pint/acre)	LIBERTY OXYFLUORFEN 4L (>0.5 to 1 pints/acre)
carrot	90 days	90 days
cotton	7 days	7 days
potato	60 days	60 days
sugar beet	60 days	90 days
other root/tuber crops	90 days	90 days
onions	180 days	180 days
other bulb vegetables	180 days	180 days
cabbage	90 days	90 days
cauliflower	90 days	90 days
other brassica crops	120 day	120 days
lettuce	90 days	120 days
other leafy vegetables (except brassica crops)	120 days	120 days
pepper	90 days	120 days
tomato	60 days	120 days
other fruiting vegetables	120 days	120 days
cantaloupe	60 days	90 days
squash	90 days	120 days
watermelon	60 days	60 days
other cucurbits	90 days	120 days
dry beans	60 days	60 days
peanut	60 days	60 days

other legume vegetables	60 days	60 days
safflower	60 days	60 days
Soybeans (Except California)	7 days	7 days
cereal grains: Including barley, buckwheat, corn, proso millet, pearl millet, oats, popcorn; rice, rye, sorghum, triticale, wheat, and wild rice	10 months	10 months
cotton and soybean	(see specific labeling for fallow beds to be planted to cotton or soybeans)	
Transplanted Crops	Minimum Treatment-to-Planting Interval	
	LIBERTY OXYFLUORFEN 4L (up to 0.5 pint/acre)	LIBERTY OXYFLUORFEN 4L (>0.5 to 1 pints/acre)
celery	30 days	30 days
conifer	0 days	0 days
garlic	0 days	30 days
grape/kiwi	0 days	0 days
onion	0 days	30 days
pepper	30 days	30 days
strawberries	30 days	30 days
tomato	30 days	30 days
tree fruit/nut/citrus	0 days	0 days

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.5 – 1 (0.25 – 0.5 lb ai)	<p>Use 20 or more gallons of spray volume per acre and increase spray volume for dense weed growth.</p> <p>Use the 0.5 pint (0.25 lb ai) per acre rate for up to 4 weeks of preemergence control and postemergence control of susceptible weeds up to 4-leaf stage. Use the 1 pint (0.5 lb ai) per acre rate for up to 8 weeks of preemergence control and postemergence control of susceptible weeds up to 6-leaf stage. Best preemergence control is achieved when irrigation or rainfall occurs within 3 or 4 weeks after application.</p> <p>A tank mix with glyphosate is advised if the treatment area contains dense weed populations, oversized weed seedlings, volunteer grains, annual grasses or under unfavorable environmental conditions.</p> <p>Outside of California: For enhanced contact activity (burndown/suppression) tank mix 3.25 fluid ounces (0.1 lb ai) of LIBERTY OXYFLUORFEN 4L with the labeled rate of either glyphosate or paraquat.</p> <p>Apply at the application rate and weed growth stages specified in the respective tank mix product</p>

		label.
<p>Precautions:</p> <ul style="list-style-type: none"> • Failure to achieve thorough and complete incorporation, or to follow the specified treatment planting interval, may result in stand reduction and/or vigor reduction of the planted crop. • Crop injury may be enhanced if newly seeded crops or transplants are under stress due to drought, flooding, excessive fertilizer or soil salts, low soil temperatures, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects or diseases. • Exercise extreme care to avoid herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • DO NOT apply more than 1 pint (0.5 lb ai) per acre per application. • DO NOT apply more than 1 pint (0.5 lb ai) per acre per year. • DO NOT make more than 2 application per acre per year when using reduced application rates. • Retreatment Interval: 10 weeks 		

Key Weeds Controlled: LIBERTY OXYFLUORFEN 4L provides preemergence and postemergence control of the following weeds on fallow beds:¹

Buttercup, Smallflower Cheeseweed (Malva) Eveningprimrose, Cutleaf ² Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Geranium, Carolina Groundcherry, Cutleaf Groundsel, Common Henbit Ladysthumb Minerslettuce	Mustard Species Nettle, Burning Oxalis Pigweed, Red Root Purslane, Common Redmaids Rocket, London Shepherdspurse Sida, Prickly Sowthistle, Annual Velvetleaf (Wild Cotton)
<p>¹ Thorough spray coverage is essential to maximize the postemergence activity of this product. For postemergence control when applied by air, a tank mixture of this product with either glyphosate or paraquat is advised.</p> <p>² Requires maximum rate and/or multiple applications for effective control.</p>	

FALLOW-BED USE PRIOR TO TRANSPLANTING PEPPERS OR STRAWBERRIES GROWN IN PLASTIC CULTURE (For Use Only in California)

LIBERTY OXYFLUORFEN 4L may be applied broadcast or banded as a fallow bed application to pre-formed beds prior to transplanting peppers or strawberries grown in plastic culture. The LIBERTY OXYFLUORFEN 4L use rate is up to 1 pint per broadcast acre. It is advised that soil moisture be used to activate LIBERTY OXYFLUORFEN 4L soon after application. This can be done by sprinkler irrigation with approximately 1/2 inch of sprinkler irrigation and then applying the plastic any time during the 30-day treatment to planting interval. Or, if there is adequate existing soil moisture, apply plastic to the beds as soon as possible after application and allow the moisture which condenses and accumulates beneath the plastic to thoroughly wet the treated soil.

Mechanical incorporation of the fallow-bed treatment prior to laying plastic is not required. Not disturbing the soil may allow for extended weed control. Not incorporating increases the potential for crop injury, especially under wet conditions. Therefore, the treatment must be incorporated if the risk of crop injury is not acceptable. The minimum treatment to planting interval is 30 days.

FALLOW BEDS IN PLASTIC CULTURE PRIOR TO TRANSPLANT
(For Use Only in Florida, Georgia, North Carolina, South Carolina and Virginia)

LIBERTY OXYFLUORFEN 4L is effective as a preemergence broadcast or banded treatment to pre-formed beds as a fallow bed application prior to planting of peppers, strawberries or tomatoes grown in plastic culture. Plastic may be put down anytime during the 30-day treatment-planting interval. Incorporation of the fallow-bed treatment prior to laying plastic is not required and may allow extended weed control. However, not incorporating increases the potential for crop injury, especially under wet conditions. Therefore, the treatment must be incorporated if the risk of crop injury is not acceptable. Follow the minimum treatment-planting intervals outlined below.

Minimum Treatment-to-Planting Interval:

Transplanted Crops	LIBERTY OXYFLUORFEN 4L Use Rate	
	Up to 0.5 pt/acre	Up to 1 pt/acre
Pepper	30 days	30 days
Strawberries	30 days	30 days
Tomato	30 days	30 days

Partial List of Weeds Controlled: Pigweed, Ragweed, Nightshade, Florida pusley, Common purslane, Carolina geranium, Cutleaf evening primrose¹.

¹Requires maximum rate and/or multiple applications for effective control.

FALLOW BEDS TO BE PLANTED TO CORN
(For Use Only in Arkansas, Louisiana, and Mississippi)

LIBERTY OXYFLUORFEN 4L alone or in tank mix combination with glyphosate or paraquat is effective for the control of winter annual broadleaf weeds in fallow beds to be planted to corn. **DO NOT** apply this product within 7 days prior to planting. Once a fallow bed application is made, the soil surface must be left undisturbed for the period of time in which weed control is desired. If a fallow bed treatment is applied thirty or more days before planting corn and at least three significant rainfalls (0.25 inch or greater) have occurred following application, corn can be planted directly into the stale seedbed. Otherwise, the fallow bed treatment must be thoroughly incorporated into the soil to a depth of two inches or more prior to planting.

Exercise extreme care to avoid herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result.

Weeds Controlled: LIBERTY OXYFLUORFEN 4L provides preemergence and postemergence control of the following weeds when used at specified dosages and weed stage.¹

Buttercup, Smallflower Cheeseweed (Malva) Eveningprimrose, Cutleaf ² Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Geranium, Carolina Groundcherry, Cutleaf	Groundsel, Common Henbit Ladysthumb Minerslettuce Mustard Species Nettle, Burning Oxalis Pigweed, Redroot	Purslane, Common Redmaids Rocket, London Shepherdspurse Sida, Prickly Sowthistle, Annual Velvetleaf (Wild Cotton)
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¹ Thorough spray coverage is essential for optimum postemergence activity of this product. For optimum postemergence control when applied by air, a tank mixture of this product with either glyphosate or paraquat is advised.

² Requires maximum rate for effective control.

Application Rates (LIBERTY OXYFLUORFEN 4L Used Alone)

LIBERTY OXYFLUORFEN 4L may be applied at 0.5 to 1 pint (0.25 to 0.5 lb ai) per broadcast acre. The lower rate (0.5 pint per acre) provides up to 4 weeks of preemergence control of susceptible weeds and

provide postemergence control of susceptible weeds (up to 4-leaf stage). The higher rate (1 pint per acre) provides preemergence control of susceptible weeds for up to 8 weeks and postemergence control of susceptible weeds (up to 6-leaf stage). Best preemergence control is achieved when irrigation or rainfall occurs within 3 or 4 weeks following application.

Tank Mixes with LIBERTY OXYFLUORFEN 4L

Important: Read and observe applicable use directions, precautions and limitation on the respective tank mix labels. In interpreting the labels of tank mix products, the most restrictive limitations must apply.

Application Rates: LIBERTY OXYFLUORFEN 4L can be tank mixed with either glyphosate or paraquat to obtain postemergence control of annual grass weeds, volunteer grains and broadleaf weeds. One-half to 1 pint (0.25 to 0.5 lb ai) of LIBERTY OXYFLUORFEN 4L may be tank mixed with labeled rates of either glyphosate or paraquat: Apply at the specified rates and growth stages for susceptible weed species and in a manner consistent with the tank mix product label.

For enhanced contact activity (burndown/suppression) of either glyphosate or paraquat, LIBERTY OXYFLUORFEN 4L at the rate of 1.75 to 3.5 fluid ounces (0.05 to 0.1 lb ai) per acre may be added to labeled rates of either glyphosate or paraquat. Apply at the specified rates and growth stages for susceptible weed species and in a manner consistent with the tank mix product label.

Method of Application

Ground Application

Apply LIBERTY OXYFLUORFEN 4L in a spray volume of 20 or more gallons per acre with ground equipment. Increase the spray volume, if necessary, to ensure thorough coverage of existing weeds.

Aerial Application

Apply this product using swirl jet or hollow cone nozzles and a spray pressure less than 40 psi to deliver a minimum spray volume of 5 gallons per acre. Make applications at a height of 6 to 10 feet above the soil surface. **DO NOT** place the nozzles on the spray booms any closer to the wing or rotor tips than 3/4 of the span; this will minimize the formation of spray or wing tip vortice roll. Nozzles must be spaced and positioned to produce a uniform spray pattern and to minimize or eliminate the formation of droplets 100 microns or less in diameter. Carefully follow aerial application requirements and advisory information in the Fallow Bed section of the product label for AX OXYFLUORFEN 2EC.

Fallow Bed - Specific Use Restrictions (Mississippi, Arkansas and Louisiana)

In addition to the following, also observe Use Restrictions listed at the beginning of this label.

- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
- **Chemigation: DO NOT** apply this product through any type of irrigation system,
- **DO NOT** apply within 7 days before planting of corn.
- **DO NOT** use corn plants from a treated field for green chop, ensilage, forage or fodder.
- This product is phytotoxic to plant foliage.
- **DO NOT** apply when weather conditions favor drift. This product is phytotoxic to plant foliage.-Avoid drift to all non-target areas.
- The use of any plants from a treated field for green chop, ensilage, forage or fodder or the feeding or grazing of animals on any treated area is prohibited.
- **Preharvest Interval (PHI):** 60 days
- **DO NOT** treat ditch banks or waterways with this product.

FALLOW BEDS TO BE PLANTED TO FIELD CORN (For Use Only in California)

LIBERTY OXYFLUORFEN 4L is effective as a preemergence and/or postemergence herbicide when used alone or in a tank mix combination with glyphosate, paraquat or other registered postemergence herbicides for the control of winter annual broadleaf weeds in fallow beds to be planted to field corn.

Before planting field corn, treated soil must be thoroughly mixed to a depth of at least 2.5 inches. Failure to achieve thorough soil mixing may lead to crop injury and/or stand loss. Weed control must not be expected after soil incorporation.

If a fallow bed treatment is applied sixty days or more prior to planting and at least three significant rainfalls (0.25 inch or greater) have occurred following application, corn can be planted directly into the stale seedbed. At least 0.25 inch of irrigation or rainfall is required to activate LIBERTY OXYFLUORFEN 4L and must occur within 3 to 4 weeks after application. If these conditions cannot be met, soil incorporation is required as directed above

Use a tank mix with glyphosate, paraquat or another registered postemergence herbicide if the treatment area contains dense weed populations, oversized weed seedlings, volunteer grains or annual grasses.

Exercise extreme care to avoid herbicide contact with any desirable dormant or non-dormant crop, plant, tree or vegetation as severe injury may result.

LIBERTY OXYFLUORFEN 4L Used Alone: LIBERTY OXYFLUORFEN 4L may be applied at 0.5 to 1 pint (0.25 to 0.5 lb ai) per acre. The lower rate (0.5 pint per acre) provides up to four weeks of preemergence control of susceptible weeds and provide postemergence control of susceptible weeds up to four-leaf stage. The higher rate (1.0 pint per acre) provides preemergence control of susceptible weeds for up to eight weeks and postemergence control of susceptible weeds up to six leaf-stage.

Tank Mixes with LIBERTY OXYFLUORFEN 4L: When tank mixing, always read and follow all individual manufacturer's labels. In interpreting all labels for the tank mix, the most restrictive situations must apply. LIBERTY OXYFLUORFEN 4L can be tank mixed with glyphosate, paraquat or other registered postemergence herbicides for postemergence control of annual weed grasses, volunteer grains and broadleaf weeds. Tank mix 0.5 to 1 pint (0.25 to 0.5 lb ai) of this product with labeled rates of glyphosate, paraquat or other registered postemergence products. Apply at the specified rates and growth stages to susceptible weed species in a manner consistent with the respective labels.

Ground Application: LIBERTY OXYFLUORFEN 4L must be applied in a minimum of 20 gallons of water per acre. The volume of water used must be increased as the weeds become taller and more dense. Use a low pressure sprayer equipped with flat fan nozzles. Spray equipment must be calibrated carefully before each use.

Aerial application: LIBERTY OXYFLUORFEN 4L may be aerially applied for weed control on fallow beds. Follow requirements for aerial application in the PRODUCT INFORMATION section of the main product label.

Avoid Drift: When applying to fallow beds, extreme care must be exercised to prevent spray drift, which could result in damage to other crops or desirable vegetation.

Crop injury may be enhanced if newly seeded crops are under stress due to drought, flooding, excessive fertilizer or soil salts, low soil temperatures, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects or diseases.

Restrictions (California Only)

- Follow all applicable use directions, precautions, restrictions, and Worker Protection Standard requirements on the EPA registered label.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre, per year.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per application.
- **DO NOT** apply within 60 days prior to planting of field corn.
- Before planting field corn, treated soil must be thoroughly mixed to a depth of at least 2.5 inches.
- **Chemigation:** Except if specified elsewhere in this label, **DO NOT** apply this product through any type of irrigation system.

- **DO NOT** use on sweet corn.
- The use of any plants from a treated field for green chop, ensilage, forage or fodder or the feeding or grazing of animals on any treated area is prohibited.
- Application may be made in a minimum of 20 gallons of water per acre using ground equipment or 5 gallons per acre by air. Applications may be made alone or as a tank mix with other herbicides.

**GROUND OR AERIAL APPLICATION OF AX OXYFLUORFEN 2EC
ON FALLOW BEDS TO COTTON OR SOYBEANS**

Not for Use on Fallow Beds to be Planted to Soybeans in California

For Use in Alabama, Arkansas, Georgia, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia

LIBERTY OXYFLUORFEN 4L is effective as a preemergence and/or postemergence herbicide when used alone or in a tank mix combination with glyphosate or paraquat for the control of winter annual broadleaf weeds in fallow beds to be planted to either cotton or soybeans.

Weeds Suppressed by Preemergence Application: LIBERTY OXYFLUORFEN 4L may be applied at 0.5 to 1 pint (0.25 to 0.5 lb ai) per broadcast acre. LIBERTY OXYFLUORFEN 4L provides preemergence suppression of the following weeds when used at specified dosages and weed stage.

horseweed (maretail)
ryegrass, italian

Conyza canadensis
Lolium multiflorum

FALLOW LAND

(Only in Idaho, Oregon and Washington)

Used alone or in a tank mix combination with glyphosate, LIBERTY OXYFLUORFEN 4L provides preemergence and/or postemergence control of listed annual broadleaf weeds in a fallow land system. LIBERTY OXYFLUORFEN 4L may be used to reduce weed growth prior to the establishment of a dry soil mulch. Use is restricted to summer fallow on land that will be planted the following year to winter wheat, barley or oats.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.25 - 1 (0.125 – 0.5 lb ai)	LIBERTY OXYFLUORFEN 2EC Alone: Preemergence weed control occurs as seedling weeds come in contact with the soil-applied herbicide during emergence. Postemergence weed control is most effective when LIBERTY OXYFLUORFEN 2EC is applied to seedling weeds less than 4 inches in height. Apply LIBERTY OXYFLUORFEN 2EC in 15 or more gallons of water per acre and increase spray volume if weed growth is dense. Use an 80% active nonionic surfactant cleared for use on growing crops for optimum postemergence weed control.
Tank Mixing: For postemergence control of annual grass weeds, 0.25 - 1 pint (0.125 – 0.5 lb ai) per acre of LIBERTY OXYFLUORFEN 2EC may be tank mixed with labeled rates of glyphosate. Follow label instructions for Fallow and Reduced Tillage Systems for the glyphosate product. Refer to Mixing Directions section for Tank Mixing Precautions.		
Use Restrictions for Fallow Land: <ul style="list-style-type: none"> • DO NOT apply more than 1 pint (0.5 lb ai) per acre per application. • DO NOT apply more than 1 pint (0.5 lb ai) per acre per year. • DO NOT make more than 2 applications per acre per year when using reduced application rates. • Retreatment Interval: 10 weeks 		

Key Weeds Controlled: LIBERTY OXYFLUORFEN 2EC provides preemergence and postemergence control of the following weeds on fallow land:

Fiddleneck, Coast Henbit Lettuce, Prickly (China Lettuce) Mustard, Blue (Purple Mustard) Mustard, Tumble (Jim Hill Mustard)	Pigweed, Red Root Purslane, Common Shepherdspurse Sowthistle, Annual
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GARBANZO BEANS (CHICKPEA)
(For Use Only in Arizona and California)

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	0.5 (0.25 lb ai)	Apply after planting but prior to weed or crop emergence as a single broadcast application using a spray volume of 20 or more gallons of water per acre.
Precautions:		
<ul style="list-style-type: none"> Garbanzo beans are resistant to preemergence application of this product, however, under certain conditions, severe but temporary crop injury may occur. A heavy splashing rain shortly after crop emergence or wet soil conditions during early growth stages can cause leaf cupping, crinkling, stunting or defoliation of the garbanzo seedlings. Injury, when it occurs, it is usually limited to the first few leaves that develop after plants emerge from the soil. Delays in crop development and/or maturity may result, but Garbanzo beans do recover with little to no impact on yield. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> DO NOT apply more than 0.5 pint (0.25 lb ai) per acre per application. DO NOT apply more than 0.5 pint (0.25 lb ai) per acre per year. DO NOT make more than 1 application per acre per year. DO NOT use bean vines for livestock feed or hay. Preharvest Interval (PHI): 30 days 		

Key Weeds Controlled:

Preemergence	
Groundsel, common Mallow, little	Rocket, london Shepherdspurse

GARLIC

For optimum preemergence weed control, the soil surface must be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices which result in redistribution or disturbance of the soil surface or move untreated soil into treated areas will reduce weed control.

Direct-Seeded Garlic (Postemergence Application):		
Weed Control	Rate (per acre)	Specific Use Directions
Postemergence	1 – 2 fl oz (0.03 – 0.06 lb ai)	<p>Northeastern States: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Apply LIBERTY OXYFLUORFEN 4L at 1 to 2 fluid ounces (0.031-0.063 lb ai) per acre to direct seeded garlic that has at least 3 fully developed true leaves using ground equipment. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. Multiple treatments at 1 to 2 fluid ounces (0.031-0.063 lb ai) per acre may be applied up to a maximum of 1 pint (16 fluid ounces) (0.5 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing. Application to weeds at later than the 4-leaf growth stage may result in reduced weed</p>

		control.
Postemergence	0.25 – 0.5 pt (0.125 – 0.25 lb ai)	Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah and Washington: Apply LIBERTY OXYFLUORFEN 4L at 0.25 to 0.5 pint (0.125- 0.25 lb ai) per acre to direct seeded garlic that has at least 2 fully developed true leaves using ground equipment. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. Multiple treatments at 0.25 to 0.5 pint (0.125-0.25 lb ai) per acre may be applied up to a maximum of 1.25 pints (0.625 lb ai) per acre per year. For optimum postemergence weed control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing. Application to weeds at later than the 4-leaf growth stage may result in reduced weed control.
Postemergence	0.25 pt (0.125 lb ai)	All Other States: Apply LIBERTY OXYFLUORFEN 4L at 0.25 pint (0.125 lb ai) per acre to seeded garlic that has at least 2 fully-developed true leaves using ground equipment. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. Multiple treatments at 0.25 pint (0.125 lb ai) per acre may be applied up to a maximum of 1 pint (0.5 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing. Application to weeds at later than the 4-leaf growth stage may result in reduced weed control.

Direct-Seeded Garlic (California Only):		
Weed Control	Rate (per acre)	Specific Use Directions
Preemergence Postemergence	0.5 pt (0.25 lb ai)	<p>Application after planting but prior to garlic emergence: Apply LIBERTY OXYFLUORFEN 4L after planting, but prior to crop emergence, for preemergence control of listed broadleaf and grass weeds using ground, air or sprinkler irrigation chemigation). Aerial application: Apply in a minimum spray volume of 10 gallons per acre. Follow Aerial Application instructions and precautions in the Product Information section of this label.</p> <p>Postemergence directed application: Apply LIBERTY OXYFLUORFEN 4L as a directed spray to garlic that is at least 12 inches tall. Accurate, uniform placement of directed postemergence sprays is essential for effective weed control and to minimize injury to garlic. Use low-pressure sprays and a minimum spray volume of 20 gallons per acre. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. For optimum postemergence control, apply when</p>

		<p>susceptible weeds are in the 2-to 4-leaf stage and actively growing. Application at later than the 4-leaf growth stage may result in reduced weed control.</p> <p>Sprinkler irrigation (portable lateral or solid set) preemergence or postemergence: Apply LIBERTY OXYFLUORFEN 4L at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Apply after planting but prior to garlic emergence or postemergence when garlic is at least 12 inches tall. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.</p>
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Precautions:

- **Garlic Response to Preemergence Applications:** Following a preemergence application of this product, a chlorotic band around some of the leaves may be observed after the first irrigation (or rainfall) following garlic emergence.
- **Garlic Response to Post-direct Applications:** Post-direct applications may cause chlorotic leaf banding, necrotic lesions, or stunting of the garlic plants. Symptoms will be more severe if applications are made during cool, wet, overcast, or foggy weather. Garlic will typically outgrow these conditions. A delay in crop development, maturity, reduced yields, or quality may result.

Transplanted Garlic: Postemergence Application Immediately after Planting		
Weed Control	Rate (per acre)	Specific Use Directions
Preemergence Postemergence	up to 1 pt (0.5 lb ai)	All States Except Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont: Transplanted garlic is most resistant to a postemergence application immediately after transplanting. An application of up to 1 pint (0.5 lb ai) per acre may be made within two days after transplanting. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area. If less than 1 pint (0.5 lb ai) per acre is applied, a second application can be made two weeks or more after transplanting. DO NOT exceed the maximum use rate of 1 pint (0.5 lb ai) per acre of per year as a result of multiple applications.
Preemergence Postemergence	1 – 2 fl oz (0.03 – 0.06 lb ai)	Northeastern States: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Multiple treatments at 1 to 2 fluid ounces (0.03 – 0.06 lb ai) per acre may be applied up to a maximum of 1 pint (16 fluid ounces) (0.5 lb ai) per acre per year. Adjust nozzles for minimum spray contact with garlic plants, directing the spray to the soil at the base of garlic plants and adjacent bed top and furrow area.

Key Weeds Controlled:

Canarygrass (Annual) Eveningprimrose, Cutleaf Groundsel, Common Mallow, Little (Malva)	Puncturevine Purslane, Common ¹ Rocket, London Sage, Lanceleaf
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Nightshade, Black Pigweed, Prostrate ¹ Pigweed, Red Root ¹	Shepherdspurse ¹ Sowthistle, Annual
¹ Key weeds controlled at specified rates in Northeastern States.	

Garlic - Crop-Specific Precaution (Postemergence Application):
 Postemergence applications of LIBERTY OXYFLUORFEN 2EC may cause chlorotic leaf banding, necrotic lesions, or stunting of the garlic plants. Symptoms may be more severe if garlic emerged under cool, wet, overcast, or foggy weather. These conditions are temporary and must not affect the vigor or development of garlic plants.

Garlic - Crop-Specific Restrictions (Applicable to All Methods of Application):

- In all states **except** Northeastern states **DO NOT** apply until direct seeded garlic plants have 2-fully developed true leaves. In the Northeastern states, **DO NOT** apply until direct seeded garlic plants have 3-fully developed true leaves. Application made prior to the specified growth stage may result in serious crop injury.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per application.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
- **DO NOT** make more than 2 application per acre per year when using reduced application rates.
- **Retreatment Interval:** 8 weeks
- **Preharvest Interval (PHI):** 60 days
- In direct-seeded garlic (except in California), **DO NOT** apply this product as a preemergence treatment.
- Use only on dry bulb garlic.
- **DO NOT** apply to garlic grown for seed.
- For weed control in Garlic, **DO NOT** mix this product with oils, surfactants, liquid fertilizers or pesticides except if specified on approved Liberty Crop Protection Supplemental Labeling.
- **DO NOT** apply to garlic plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects, nematodes or diseases.

**GRASSES GROWN FOR SEED (ESTABLISHED PERENNIAL)
 (For Use Only in Idaho, Oregon and Washington)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Late preemergence to Early postemergence Fine fescues (Chewings, creeping red, and hard types)	0.25 (0.125 lb ai)	Make a single application of LIBERTY OXYFLUORFEN 2EC at 0.25 pints (0.125 lb ai) per acre per year. The application must be applied before the weed seedlings to be controlled exceed the two-leaf growth stage (Use Period: September 1 to December 15).
Late preemergence to Early postemergence Kentucky bluegrass, tall fescue, orchardgrass, bentgrass, perennial ryegrass	0.25 – 0.75 (0.125 – 0.375 lb ai)	Apply as a broadcast application in a minimum spray volume of 20 gallons of water per acre. Use conventional ground spray equipment with flat fan spray nozzles at a minimum spray pressure of 30 psi. DO NOT exceed maximum spray pressure of 60 psi. Spray equipment must be calibrated prior to application. Select an application rate based on soil conditions, weed spectrum, weed stage of growth and/or desired period of residual weed control. The maximum rate of 0.75 pint of LIBERTY OXYFLUORFEN 2EC may be split, however, the initial application must be applied before the weed (or volunteer grass) seedlings to be controlled exceed the 2-leaf growth stage and no later than December 15. The final application must be completed prior to January 15. A maximum of 0.75 pints of LIBERTY OXYFLUORFEN 2EC (0.375 lb ai) per acre may be applied per year.

	<p>Early treatment is important for control of seedling grasses. Apply LIBERTY OXYFLUORFEN 2EC at the onset of grass seed germination during the initial fall rains or fall sprinkler irrigation (late preemergence). Application at the 1-leaf growth stage (early postemergence) may provide somewhat better control of volunteer crop seedlings than application at the 2-leaf stage. Ample soil moisture soon after application is required for optimum performance against seedling grasses.</p> <p>LIBERTY OXYFLUORFEN 2EC will not control established perennial grasses or seedlings of most annual and perennial grasses beyond the six-leaf stage of growth. Applications to seedling grass weeds between the 2- and 6-leaf stage may result in partial control, but vary with weed species. Single applications made to seedlings between the 2- and 6-leaf growth stages will cause injury and stunting, but re-growth will usually occur. If seedlings have not died within 3 to 4 weeks after treatment and healthy green regrowth is visible, a second application may be needed.</p> <p>Surfactant</p> <p>For improved control of emerged weed seedlings, an 80% active nonionic surfactant cleared for application to growing crops may be added at a rate of 0.12 to 0.5% spray volume (1 to 4 pints/100 gal).</p>
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Precautions:

Crop Resistance

The application of this product to established perennial grass will result in a chlorosis (yellowing) within two weeks after treatment. These symptoms may be present for up to three months following application. The application of this product may also result in a substantial reduction in vegetative growth of perennial grasses during the winter. Leaf chlorosis and reduction of vegetative growth is a typical and normal response, however, the seed yield from healthy, vigorous perennial grasses has not been affected by fall application of this product. It is accepted by the grower that conditions under which seed yield may be reduced are not fully understood. Grazing may also magnify crop injury and reduce the seed yield.

Crop resistance to this product can be improved by limiting the amount of leaf tissue present on established perennial grasses at time of application by such methods as propane flaming, intensive mechanical clipping (crew-cutting), or livestock grazing prior to application.

Tank mixtures and/or sequential applications of this product with other herbicide products registered for use on grasses grown for seed may result in increased injury or stand loss. If a tank mixture is applied, applications must be made only to healthy, vigorous stands of perennial grasses. The decision to apply a tank mixture containing LIBERTY OXYFLUORFEN 2EC is at the sole discretion of the grower and at the grower's risk.

Crop-Specific Restrictions:

- **Chemigation: DO NOT** apply this product through any type of irrigation system.
- This product must be applied using ground equipment only.
- **DO NOT** apply more than 0.75 pints (0.375 lb ai) per acre per application.
- **DO NOT** apply more than 0.75 pints (0.375 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per acre per year when using reduced application rates.
- **DO NOT** make more than 1 application per year to fine fescues.
- **Preharvest Interval (PHI): Oregon** 150 days; **Idaho and Washington** 365 days
- **DO NOT** graze fields that have been treated with this product within 150 days of treatment in

Oregon or within 365 days of treatment in Idaho and Washington as illegal residues may be present in the vegetative foliage.

Weeds Suppressed and/or Controlled

LIBERTY OXYFLUORFEN 2EC will control or suppress the following weeds and volunteer crops when applied between the onset of germination and the two-leaf seedling growth stage:

Common Name	Scientific Name
Bentgrass	<i>Agrostis</i> spp.
Bluegrass, Annual	<i>Poa annua</i>
Bluegrass, Kentucky	<i>Poa pratensis</i>
Bluegrass, Roughstalk	<i>Poa trivialis</i>
Brome, California (mountain) ¹	<i>Bromus carinatus</i>
Fescue, Fine (creeping red and Chewings)	<i>Festuca rubra</i>
Fescue, Hard	<i>Festuca longifolia</i>
Fescue, Rattail	<i>Vulpia myuros</i>
Fescue, Tall	<i>Festuca arundinacea</i>
Orchardgrass	<i>Dactylis glomerata</i>
Rvegrass, Italian	<i>Lolium multiflorum</i>
Ryegrass, Perennial ¹	<i>Lolium perenne</i>

¹These species are suppressed but not fully controlled by this product.

GRASSES GROWN FOR SEED
(Fall Seeded New Plantings of Perennial Ryegrass and Tall Fescue)
(For Use Only in Oregon)

Weed Control	Rate (fl oz/acre)	Specific Use Directions
Early postemergence	1 – 1.5 (0.03 – 0.05 lb ai)	Use LIBERTY OXYFLUORFEN 2EC for early postemergence suppression/control of various annual broadleaf weed seedlings in fall seeded perennial ryegrass or tall fescue that has at least 1 to 2 tillers. Applications to seedling plants that have not yet tillered, may result in severe crop injury or stand loss (plant death). Apply a single application of LIBERTY OXYFLUORFEN 2EC either alone or in a tank mix with Ethofumesate. Some temporary crop injury may occur but is typically only a transient effect and must not adversely impact yield. Control from the LIBERTY OXYFLUORFEN 2EC is primarily directed at emerged seedling broadleaf weeds including speedwell and groundsel, but control or suppression of other species is possible if tank mixed with Ethofumesate. Apply as a broadcast application in a minimum spray volume of 20 gallons of water per acre. Use conventional ground spray equipment with flat fan spray nozzles at the manufacturer's specified spray pressure. Calibrate spray equipment before each use. Use of Surfactant: An 80 percent active nonionic surfactant cleared for application to growing crops may be added at a rate of 0.12 to 0.5 percent spray volume for improved control of emerged seedlings.

Precautions:

- **Crop Resistance.** The application of this product to fall seeded perennial ryegrass and tall fescue (that have at least 1 to 2 tillers) will result in chlorosis (yellowing) of the foliage within two weeks after treatment. Some symptoms may be present for up to three months following application. The

use of this product may also result in a substantial reduction in vegetative growth by perennial grasses during the winter. Leaf chlorosis and reduction of vegetative growth is a typical and normal response and seed yield of healthy, vigorous perennial grasses is typically not affected by fall application of this product. It is accepted by the grower that conditions under which seed yield may be reduced are not fully understood and that a reduction in seed yield may occur.

- Overlaps (2X applications) will cause significant crop injury but must not result in excessive stand losses if the crop plants are at least 1 to 2 tillers when the applications are made.
- Tank mixtures of LIBERTY OXYFLUORFEN 2EC with Ethofumesate may result in enhanced crop injury. If a tank mixture is to be applied, applications must be made only to healthy, vigorous stands of perennial grasses. The decision to apply a tank mixture containing LIBERTY OXYFLUORFEN 2EC is at the sole discretion of the grower and at the grower's risk.

Crop-Specific Restrictions:

- **DO NOT** apply to newly planted stands that are under stress from any cause as there is an enhanced opportunity for crop injury to occur.
- **Chemigation: DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply more than 1.5 fluid ounces (0.05 lb ai) per acre per application.
- **DO NOT** apply more than 1.5 fluid ounces (0.05 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per year when using reduced application rates.
- **DO NOT** graze livestock in treated fields within 150 days of application.
- **Preharvest Interval (PHI):** 150 days
- This product must be applied only by ground application equipment.
- **DO NOT** graze fields that have been treated with this product as illegal residues may be present in the vegetative forage.

Weeds Suppressed and/or Controlled: LIBERTY OXYFLUORFEN 2EC will provide control or suppression of the following weeds and volunteer crops when applied between the onset of germination and the two-leaf seedling growth stage:

Common Name	Scientific Name
Groundsel, Common	<i>Senecio vulgaris</i>
Speedwell	<i>Veronica</i> spp.

**GUAVA (BEARING AND NON-BEARING)
(For Use Only in Hawaii)**

Weed Control	Rate (pint/acre)	Specific Use Directions
Preemergence	2.5 – 4 (1.25 – 2.0 lb ai)	<p>Preemergence or Postemergence: In established guava plantings, apply preemergence or postemergence to weeds. Increase the spray volume to ensure adequate coverage in high densities of emerged weeds or heavy trash. Minimize contact with guava plants by directing the spray to the soil surface. Spray shields are suggested to minimize spray contact in young plantings.</p> <p>For broader spectrum postemergence control of grass and broadleaf weeds, LIBERTY OXYFLUORFEN 4L may be applied in tank mix combination with paraquat or glyphosate.</p> <p>Follow applicable use directions, precautions and limitations on the labels of the respective tank mix products.</p>
Postemergence	1 – 4 (0.5 – 2.0 lb ai)	

Precautions:

- Prevent direct spray or drift from contacting green stems, fruit or foliage, as injury may result.
- Alone or in tank mix combination, this product must be applied to only healthy growing trees.

<ul style="list-style-type: none"> • Application of this product must be made only after new foliage growth has hardened off.
Crop-Specific Restrictions: <ul style="list-style-type: none"> • DO NOT apply more than 4 pints of LIBERTY OXYFLUORFEN 4L (2.0 lb ai) per acre per application. • DO NOT apply more than 8 pints of LIBERTY OXYFLUORFEN 4L (4.0 lb ai) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks • Preharvest Interval (PHI): 1 day

Key Weeds Controlled:

Preemergence	Postemergence
Ageratum Buttonweed Crotalaria Purslane, Common Spurge, Garden	Purslane, Common Spurge, Garden

HORSERADISH

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1 (0.5 lb ai)	Apply LIBERTY OXYFLUORFEN 4L after the horseradish roots have been planted but prior to emergence of new horseradish leaves. Emerged leaves that receive direct or indirect spray (drift) contact will be injured. If necessary, cultivate before application to destroy germinated weeds.

Crop-Specific Restrictions:

- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per crop.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
- **DO NOT** make more than 1 application per acre per year.
- **Preharvest Interval (PHI):** 60 days
- **DO NOT** apply this product to horseradish plantings that have been weakened or stressed due to unfavorable temperature conditions, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.

Key Weeds Controlled:

Lambsquarters, Common Pigweed, Redroot Purslane, Common	Sheperdspurse Smartweed, Pennsylvania
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JOJOBA

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 – 1.5 lb ai)	Initial application may be made when jojoba plants have reached a height of 6 inches or more. Use sufficient spray volume to ensure thorough coverage of dense weed growth. Sprays must be directed to the base of jojoba plants to avoid possible phytotoxicity to foliage. Spray shields are suggested for use in young plantings. Use higher rate in rate range for extended residual preemergence weed control. Make follow-up applications as necessary to maintain weed control. For early postemergence control of susceptible seedling weeds (less than 8 inches tall) apply

		LIBERTY OXYFLUORFEN 4L at the rate of 2 pints (1.0 lb ai) per acre. LIBERTY OXYFLUORFEN 4L may be applied at the rate of 3 pints (1.5 lb ai) per acre for postemergence control of weeds up to 12 inches tall. For optimum residual control, apply during the fall or winter months. Control may be unsatisfactory for weeds greater than 12 inches tall.
Precautions:		
<ul style="list-style-type: none"> • Avoid direct spray or drift contact with jojoba flowers or buds as severe injury may result, • Over-the-top applications may cause burning, crinkling or bronzing of jojoba foliage, particularly to the youngest leaves, flowers, or buds present at the time of application. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. • DO NOT apply more than 3 pints (1.5 lb ai) per acre per year. • DO NOT make more than 1 application per acre per year. • Preharvest Interval (PHI): 30 days. 		

Key Weeds Controlled:

Preemergence	Postemergence
Burclover	Fiddleneck, Coast
Fiddleneck, Coast	Filaree, Broadleaf ²
Filaree, Broadleaf	Filaree, Redstem ²
Filaree, Redstem	Filaree, Whitestem ²
Filaree, Whitestem	Groundsel, Common ¹
Groundsel, Common	Henbit
Henbit	Mallow, Little (Malva, Cheeseweed)
Knotweed, Prostrate	Minerslettuce
Lambsquarters, Common	Nettle, Burning
Lettuce, Prickly	Pigweed, Red Root ¹
Mallow, Little (Malva, Cheeseweed)	Redmaids
Pigweed, Red Root	Shepherdspurse
Purslane, Common	Sowthistle, Annual
Redmaids	
Rocket, London	
Shepherdspurse	
Sowthistle, Annual	

¹ Highest rate may be required for acceptable postemergence control.
² This product at the 3-pint rate will provide control of filaree not exceeding the 4-inch stage. Applications to filaree beyond the 4-inch stage may result in partial control.

MINT (SPEARMINT AND PEPPERMINT TOPS)

Mint (Spearmint and Peppermint) Grown on Mineral Soils		
Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 – 1.5 lb ai)	Oregon and Washington (East of Cascades), California, Montana, Idaho, Nevada, South Dakota and Utah: Apply from December through March when mint is dormant. When used postemergence (to weeds), add an 80% active ingredient nonionic surfactant at the rate of one quart per 100 gallons of spray volume and apply before weeds exceed a height of 4 inches. Late winter applications will provide maximum activity

		on summer weeds, but summer grass control may be inconsistent. For best results, fall-plowed fields must be harrowed to provide a smooth surface for application. In furrow-irrigated fields, corrugating must be done prior to application. Corrugating or harrowing will result in disturbance of treated soil or movement of untreated soil into treated areas, resulting in poor weed control.
Preemergence	1 – 1.5 (0.5 – 0.75 lb ai)	Peppermint (Western Oregon Willamette Valley): Apply LIBERTY OXYFLUORFEN 4L from November through February to dormant peppermint only. Treatments in January or February provide better residual preemergence control of annual broadleaf weeds. Full season weed control must not be expected from this treatment.
Precautions:		
<ul style="list-style-type: none"> Application must be made prior to emergence of new spring growth or severe crop injury may result. 		
Crop-Specific Restrictions:		
<ul style="list-style-type: none"> DO NOT apply to spearmint or peppermint weakened by disease, drought, flooding, excessive fertilizer, soil salts, previously applied pesticides, nematodes, insects, or winter injury, as severe injury may result. Apply this product only to healthy stands of spearmint and peppermint. In the Willamette valley, DO NOT apply this product to mint that has been plowed. DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. DO NOT apply more than 3 pints (1.5 lb ai) per acre per year. DO NOT make more than 1 application per acre per year. Preharvest Interval (PHI): 30 days. 		

Key Weeds Controlled:

Bedstraw, Catchweed Bluegrass, Annual ¹ Flixweed Groundsel, Common Lambsquarters, Common Lettuce, Prickly (China Lettuce) Mustard, Blue (Purple Mustard) Mustard, Tumble (Jim Hill Mustard) Nightshade, Hairy	Oats, Wild ¹ Orach, Red Pepperweed, Yellowflower Pigweed, Red Root Ryegrass, Italian ¹ Shepherdspurse Sowthistle, Annual Tansymustard Thistle, Russian
¹ Control of annual grasses is best obtained when this product is applied prior to emergence. Postemergence control of winter annual grasses is generally unsatisfactory if applications are made after the 1 to 2-leaf stage.	

Mint (Spearmint and Peppermint Tops) Grown on Muck Soils: For Use Only on Mint Grown in Indiana, Michigan, Montana, North Dakota, South Dakota, and Wisconsin

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 – 1.5 lb ai)	<p>Note: Use directions in this section apply only to spearmint and peppermint grown on muck soils (organic matter content of 20% or greater).</p> <p>When used postemergence (to weeds), add an 80% active ingredient nonionic surfactant at the rate of one quart per 100 gallons of spray volume and apply</p>

	before weeds exceed a height of 4 inches.
Precautions:	
<ul style="list-style-type: none"> • Application must be made prior to emergence of new spring growth or severe crop injury may result. 	
Crop-Specific Restrictions:	
<ul style="list-style-type: none"> • To avoid excessive crop injury, DO NOT apply within 4 days of planting (sprigging) spearmint or peppermint. • Apply LIBERTY OXYFLUORFEN 4L only to healthy spearmint or peppermint. DO NOT apply to spearmint or peppermint that has been weakened by disease, nematodes, soil insects, or winter injury, as severe injury may result. • DO NOT apply more than 3 pints (1.5 lb ai) per acre per application. • DO NOT apply more than 3 pints (1.5 lb ai) per acre per year. • DO NOT make more than 1 application per acre per year. • Preharvest Interval (PHI): 180 days. 	

Key Weeds Controlled:

Knotweed, Prostrate
Pigweed, Redroot
Purslane, Common

NON-CROP USE

Non-Food-Producing, Non-Cultivated Agricultural or Non-Agricultural Areas, (including Highway and Utility Rights-of-Way, Roadways, Industrial Sites, Tank Farms, Storage Areas, Airports, Fencerows, and Farmsteads)

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	2.5 – 4 (1.25 – 2.0 lb ai)	<p>Preemergence: Use higher rate in rate range for longer residual control.</p> <p>Postemergence: Use the lower rate in the rate range for control of susceptible weeds in the early postemergence stage, less than 4 inches tall. Use the higher rate for weeds up to 12 inches tall. Application to weeds beyond the 4-inch stage may result in partial control.</p>
Postemergence	1 – 4 (0.5 – 2.0 lb ai)	
<p>Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. It is the pesticide user's responsibility to ensure that all products are registered for 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</p> <ul style="list-style-type: none"> • Preemergence: For broader-spectrum residual preemergence weed control, this product may be applied in tank mix combination with diuron or simazine. • Postemergence: For additional postemergence control of susceptible grass and broadleaf weeds, this product may be applied in tank mix combination with paraquat or glyphosate. 		
Site-Specific Restrictions:		
<ul style="list-style-type: none"> • DO NOT feed or allow animals to graze on any areas treated with this product. • DO NOT apply more than 4 pints (2.0 lb ai) per acre per application. • DO NOT apply more than 8 pints (4.0 lb ai) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks 		

Key Weeds Controlled:

Preemergence	Postemergence
Burclover Cheeseweed (Malva)	Cheeseweed (Malva) Fiddleneck, Coast

Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Groundsel, Common Henbit Knotweed, Prostrate Lambsquarters, Common Lettuce, Prickly Pigweed, Red Root Purslane, Common Redmaids Rocket, London Shepherdspurse Sowthistle, Annual	Filaree, Broadleaf Filaree, Redstem Groundsel, Common Henbit Minerslettuce Nettle, Burning Pigweed, Red Root Purslane, Common Redmaids Shepherdspurse Sowthistle, Annual
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**In addition to the above weeds, LIBERTY OXYFLUORFEN 4L also controls the following weeds:
Mile-A-Minute**

(For use in Connecticut and Pennsylvania)

LIBERTY OXYFLUORFEN 4L herbicide is advised for postemergence and preemergence control of Mile-a-Minute. LIBERTY OXYFLUORFEN 4L herbicide is advised for postemergence control at 1 pint (0.5 lb ai) per broadcast acre. This rate is advised for the control in the early postemergence stage (up to 4-leaf stage) in height. If applied to seedlings greater than the 4 leaf stage, the degree of suppression/burn down of existing growth is dependent on thorough and complete spray coverage of the weed. For preemergence control, LIBERTY OXYFLUORFEN 4L herbicide is advised at 1 pint (0.5 lb ai) per broadcast acre.

For the greatest benefit of LIBERTY OXYFLUORFEN 4L herbicide for preemergence control, adequate coverage of the soil and vegetative trash is required. Control of escape Mile-a-Minute seedlings must be obtained through postemergence applications of LIBERTY OXYFLUORFEN 4L herbicide. **DO NOT** apply more than 1 pint (0.5 lb ai) of LIBERTY OXYFLUORFEN 4L herbicide per broadcast acre as a single application or more than 4 pints (1.0 lb. active) per broadcast acre per year as a result of multiple applications. It is advised that a 80% active nonionic surfactant be added to the spray mixture at a rate of 9.8 mls (2 teaspoons or 0.4 fluid ounces) per 1 gallon of spray.

LIBERTY OXYFLUORFEN 4L herbicide must be applied in a minimum of 40 gallons of water per acre. Best preemergence results are achieved when spray is applied to a relatively weed-free soil surface. The volume of water used must be increased as the weeds become taller and more dense. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment must be calibrated carefully before each use.

Weed Stage	Gallons of Water Per Acre
Early Postemergence (weeds up to 4-leaf stage)	40 or more
Postemergence (weeds up to 8-leaf stage)	100 or more
Preemergence	40 or more

Witchweed

(For Use Only in North Carolina and South Carolina)

LIBERTY OXYFLUORFEN 4L herbicide is advised for postemergence and preemergence control of witchweed (*Striga asiatica*). LIBERTY OXYFLUORFEN 4L herbicide is advised for postemergence control at 1 to 2 pints (0.5 to 1.0 lb ai) per broadcast acre. Higher rates must be used for the control of dense populations of witchweed or where large witchweed plants are present. It is advised that a 80% active nonionic surfactant be added to the spray mixture at a rate of 0.125% v/v (1 pint per 100 gallons of spray mix).

LIBERTY OXYFLUORFEN 4L herbicide must be applied to witchweed plants before blooms form, to prevent the production of viable seed. Apply in a minimum of 10 gallons of water per acre. The volume of water used must be increased as the weeds become taller and more dense. Use a low-pressure sprayer equipped with flat fan or whirl chamber nozzles. Spray equipment must be calibrated carefully before each use.

ONIONS (CALIFORNIA ONLY) FOR APPLICATIONS TO ONIONS AT FIRST TRUE LEAF STAGE.

For applications to onions at later growth stages, refer to the ONION section below.

Weed Control	Rate (oz/acre)	Specific Use Directions
Postemergence	4-6 (0.125 - 0.188 lb ai)	<p>LIBERTY OXYFLUORFEN 4L may be applied as a broadcast or directed spray for the postemergence suppression or control of susceptible broadleaf weed species in dry bulb onions. Apply LIBERTY OXYFLUORFEN 4L after all onions have at least one true leaf fully emerged, extended and developed. The second true leaf must be visible at the time of application. The cotyledon ("flag leaf") is not the first true leaf. Best weed control results are obtained when LIBERTY OXYFLUORFEN 4L is applied to young (1-4 leaf), actively growing weeds. DO NOT apply to onions grown for seed, except as specified on other labels.</p> <p>Application timing: Apply LIBERTY OXYFLUORFEN 4L after all onions have at least one true leaf fully emerged, extended and developed. The second true leaf must be visible at the time of application. The cotyledon ("flag leaf") is not the first true leaf.</p> <p>Additional applications may be made during later stages of crop development. The total amount of LIBERTY OXYFLUORFEN 4L applied must not exceed 16 fluid ounces (0.5 lb ai) per acre per crop. Oxyfluorfen also may be used for later applications. The total amount of oxyfluorfen applied must not exceed 0.5 lb ai per acre per crop.</p> <p>Ground Application: Apply with ground equipment in a spray volume of at least 20 gallons of water per acre. Higher spray volumes are advised for best results. Increase the spray volume to ensure complete and uniform coverage as weed height and density increases. Use a low-pressure sprayer operated at the manufacturer's specified pressure.</p> <p>Chemigation: Apply 4 fluidounces (0.125 lb ai) of product per acre, using a solid set or portable lateral sprinkler irrigation system. Follow all directions given in the CHEMIGATION INSTRUCTIONS section. Refer to AERIAL APPLICATION section for buffer zone requirements. For upwind and side borders, maintain a minimum buffer zone of 150 feet from any vegetable crop or fallow bed field which will be planted to a crop within the number of days specified in the USE ON FALLOW BEDS section.</p>

Precautions:

- **Crop Resistance:** Dry bulb onions are tolerant to postemergence applications of this product, but application may result in some crop injury. **DO NOT** apply this product if the risk of crop injury is considered unacceptable. When applied to dry bulb onions at the first true leaf stage, this product may cause spotting, twisting or stunting. Injury is more likely when cold conditions (<40° F) occur before or after treatment, or when extended cool or cloudy conditions reduce active plant growth. When injury occurs, it usually is limited to the treated leaves, with new leaves emerging undamaged. Delay in crop development and/or maturity, and yield reduction may result from treatment to dry bulb onions with this product under these conditions.

Onions – Crop-Specific Restrictions (California Only)

- Use this product only on dry bulb onions
- **DO NOT** apply this product to onions grown for seed, except as instructed in separate use directions.
- At the time of application, all onion plants must have at least one true leaf fully emerged, extended and developed. The second true leaf must be visible at the time of application. The cotyledon ("flag leaf") is not the first true leaf.
- **DO NOT** apply this product to dry bulb onions when air temperatures are below 40°F at any time during the seven day period before application, or if air temperatures are expected to be below 40°F during the seven day period after the planned application.
- **DO NOT** apply more than 6 fluid ounces (0.188 lb ai) per acre by ground per application.
- **DO NOT** apply more than 4 fluid ounces (0.125 lb ai) per acre by chemigation at the first true leaf stage of crop development.
- **DO NOT** apply more than 16 fluid ounces (0.5 lb ai) per year per year.
- If an oxyfluorfen containing product is used for later applications, the total amount of oxyfluorfen applied must not exceed 0.5 lb ai per acre per application.
- **DO NOT** apply this product with adjuvants, oils, surfactants, liquid fertilizers or pesticides.
- **Preharvest Interval (PHI):** 45 days
- **DO NOT** apply this product when weather conditions favor drift. Avoid LIBERTY OXYFLUORFEN 4L drift to all non-target areas. This product is phytotoxic to susceptible plant foliage.
- **DO NOT** apply this product if heavy rainfall is predicted to occur within 24 hours after the planned application.
- **DO NOT** apply this product to plants that are weakened or are under stress due to temperature, disease, fertilizer, soil, salts, nematodes, insects, pesticides, drought, excessive moisture, flooding, or soil crusting.
- **DO NOT** apply this product as a preemergence treatment to direct-seeded onions.
- Tank mixtures of this product with oils, surfactants, liquid fertilizers or other pesticides may be made but could result in enhanced crop response/injury and are the responsibility of the user.

ONIONS

For optimum preemergence weed control, the soil surface must be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices that result in redistribution or disturbance of the soil surface or move untreated soil into treated areas will reduce weed control.

Direct-Seeded Onions: Postemergence Application

Weed Control	Rate (per acre)	Specific Use Directions
Postemergence	1 – 2 fl oz (0.03 – 0.06 lb ai)	Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Apply LIBERTY OXYFLUORFEN 4L at 1 to 2 fluid ounces (0.03 – 0.06 lb ai) per acre to direct-seeded onions that have at least 3 fully-developed true leaves using ground equipment. Multiple treatments at 1 to 2 fluid ounces (0.03 – 0.06 lb ai) per acre may be applied up to a maximum of 1

		pint (16 fluid ounces) (0.5 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing.
Postemergence	0.25 – 0.5 pt (0.125 – 0.25 lb ai)	Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah and Washington: Apply LIBERTY OXYFLUORFEN 4L at 0.25 to 0.5 pint (0.125 – 0.25 lb ai) per acre to direct-seeded onions that have at least 2 fully-developed true leaves, using ground equipment. Multiple treatments at 0.25 to 0.5 pint (0.125 – 0.25 lb ai) per acre may be applied up to a maximum of 1.25 pints (0.625 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing. Sprinkler Irrigation (center pivot, portable lateral or solid set): Apply LIBERTY OXYFLUORFEN 4L at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.
Postemergence	0.25 pt (0.125 lb ai)	All other states: Apply LIBERTY OXYFLUORFEN 4L at 0.25 pint (0.125 lb ai) per acre to direct seeded onions that have at least 2 fully developed true leaves using ground equipment. Multiple treatments at 0.25 pint (0.125 lb ai) per acre may be applied up to a maximum of 1 pint (0.5 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2-to 4-leaf stage and actively growing. Sprinkler Irrigation (center pivot, portable lateral or solid set): Apply LIBERTY OXYFLUORFEN 4L at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.

Transplanted Onions: Application Immediately before Planting		
Weed Control	Rate (per acre)	Specific Use Directions
Preemergence Postemergence	0.5 – 1 pt (0.25 – 0.5 lb ai)	Pre-transplant application (not for use in Northeastern states or Western states): LIBERTY OXYFLUORFEN 4L may be applied as a broadcast or band application after completion of tillage operations, but before transplanting of onion plants. Transplanting must be accomplished with a minimum of soil disturbance. For optimum weed control, soil surfaces must be left undisturbed after transplanting for the period for which weed control is desired. However, timely cultivation after weed emergence will assist in weed control. If less than 1 pint (0.5 lb ai) per acre was applied as a pre-transplant application, postemergence applications may be

		made as instructed for seeded onions. DO NOT exceed the maximum use rate of 1 pint (0.5 lb ai) per acre per year as a result of multiple applications.
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Transplanted Onions: Application Immediately after Planting		
Weed Control	Rate (per acre)	Specific Use Directions
Preemergence	up to 1 pt (0.5 lb ai)	All states except Northeastern states: Transplanted onions are most tolerant of a postemergence application immediately after transplanting. An application of up to 1 pint (0.5 lb ai) per acre may be made within two days after transplanting. If less than 1 pint (0.5 lb ai) per acre is applied, a second application can be made two weeks or more after transplanting. DO NOT exceed the maximum use rate of 1 pint (0.5 lb ai) per acre of LIBERTY OXYFLUORFEN 4L per year as a result of multiple applications.
Preemergence	1 – 2 fl oz (0.03 – 0.06 lb ai)	Northeastern states including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Multiple treatments at 1 to 3 fluid ounces (0.03-0.06 lb ai) per acre may be applied up to a maximum of 1 pint (16 fluid ounces) (0.5 lb ai) per acre per year.

Onions - Use Precautions (applicable to all areas and methods of application):
<ul style="list-style-type: none"> • This product can cause necrotic lesions, twisting, pigtailling or stunting of the onion plants. Injury will be more severe if applications are made immediately following or during cool, wet weather and/or if applications are made prior to the specified onion growth stage of the onion plants as specified in Specific Use Directions.

Onions - Crop-Specific Restrictions (applicable to all areas and methods of application):
<ul style="list-style-type: none"> • DO NOT apply to onion plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects, nematodes or diseases. • In all states except Northeastern states, DO NOT apply until direct-seeded onion plants have at least two fully-developed true leaves. In the Northeastern states, DO NOT apply until direct-seeded onion plants have at least three fully-developed true leaves. Application made prior to the specified growth stage may result in serious crop injury. • DO NOT apply more than 1 pint (0.5 lb ai) per acre per application. • DO NOT apply more than 1 pint (0.5 lb ai) per acre per year. • DO NOT make more than 4 applications per acre per year when using reduced application rates. • Retreatment Interval: 8 weeks • Preharvest Interval (PHI): 45 days • DO NOT apply this product as a preemergence treatment to direct-seeded onions. • Use only on dry bulb onions. • DO NOT apply to onions grown for seed, except as instructed in separate use directions. • Tank mixtures of this product with oils, surfactants, liquid fertilizers or other pesticides may be made but could result in enhanced crop response/injury and are the responsibility of the user.

Key Weeds Controlled:

Postemergence	
Canarygrass (Annual) Eveningprimrose, Cutleaf ^(A) Groundsel, Common Mallow, Little (Malva) Nightshade, Black Pigweed, Prostrate ^(B) Pigweed, Redroot ^(A,B)	Puncturevine Purslane, Common ^(A) Rocket, London Sage, Lanceleaf Shepherdspurse ^(B) Sowthistle, Annual
<p>^a Weeds controlled when applied as a pre-transplant application. In addition, this product at the rate of 0.5 to 1 pint per acre will provide control/suppression of carpetweed, Pennsylvania smartweed, galinsoga, common lambsquarters, and wild mustard. Applications of this product to muck soils may result in partial control or suppression of the weeds listed.</p> <p>^b Specific weeds controlled at specified rates for use in Northeastern states (see SPECIFIC USE DIRECTIONS section).</p>	

ONIONS GROWN FOR SEED

Weed Control	Rate (per acre)	Specific Use Directions
Preemergence	1 fl oz (0.03 lb ai)	Northeastern States including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont: Multiple treatments at 1 fluid ounce (0.03 lb ai) per acre may be applied up to a maximum of 1 pint (16 fluid ounces) (0.5 lb ai) per acre per year. Prior to initial treatment, seeded onions must have at least four (4) true leaves. Multiple treatments at the aforementioned rate may be applied.
Preemergence	up to 0.25 pt (0.125 lb ai)	All other States: Apply LIBERTY OXYFLUORFEN 4L at up to 0.25 pint (0.125 lb ai) per acre to seeded onions that have at least 3-true leaves. Multiple treatments at 0.25 pint (0.125 lb ai) per acre may be applied up to a maximum of 1 pint (0.5 lb ai) per acre per year. For optimum postemergence control, apply when susceptible weeds are in the 2 to 4-leaf stage and actively growing. Sprinkler Irrigation - Portable Lateral or Solid Set: Apply LIBERTY OXYFLUORFEN 4L at the specified broadcast application rate using sufficient irrigation to wet soil to a depth of 2 inches. Follow the application directions and precautions for "Sprinkler Chemigation" given in the Chemigation section of this label.

Use Precautions:

- **Notice:** Some varieties or inbred lines of onions may be more susceptible to this product. Care must be taken to insure that the particular onion variety or line being grown is resistant to this product. It is suggested that all onion varieties or lines be tested in limited areas to ensure an adequate level of crop resistance prior to an application for postemergence weed control.
- This product can cause necrotic lesions, twisting, pigtailling or stunting of the onion plants. Injury will be more severe if applications are made immediately following or during cool, wet weather and/or if applications are made prior to the specified onion growth stage of the onion plants as specified in Specific Use Directions.

Crop-Specific Restrictions:

- In all states, **DO NOT** apply this product until the onions have reached the minimum leaf stage

specified. Application prior to the specified stage of development may result in serious injury.

- **DO NOT** apply to onion plants that are under stress due to drought, flooding, excessive fertilizer or soil salts, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects or diseases.
- **DO NOT** apply more than 0.25 pints (0.125 lb ai) per acre per application.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per acre per year.
- **Retreatment Interval:** 8 weeks
- **Preharvest Interval (PHI):** 60 days
- For seeded onions, **DO NOT** apply this product with oils, surfactants, liquid fertilizers or other pesticides.

Key Weeds Controlled:

Postemergence	
Canarygrass (Annual) Eveningprimrose, Cutleaf Groundsel, Common Mallow, Little (Malva) Nightshade, Black Pigweed, Prostrate ¹ Pigweed, Red Root ¹	Puncturevine Purslane, Common ¹ Rocket, London Sage, Lanceleaf Shepherdspurse Sowthistle, Annual
¹ Specific weeds controlled at specified rates for use in Northeastern states (see SPECIFIC USE DIRECTIONS section).	

**PAPAYA
(For Use Only in Hawaii)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 (1.0 lb ai)	<p>The initial application must occur no sooner than 4 months after transplanting or 6 months after direct seeding, and after the papaya has reached a minimum height of 4 feet. Applications may be repeated at approximate 4-month intervals.</p> <p>Apply preemergence or postemergence to weeds. Increase the spray volume to assure adequate coverage of dense growth of emerged weeds. LIBERTY OXYFLUORFEN 4L must be applied as a directed spray to the orchard floor beneath the papaya plants. Accurate, uniform placement of LIBERTY OXYFLUORFEN 4L is essential for effective weed control and to minimize crop injury. LIBERTY OXYFLUORFEN 4L must be applied using rigid precision ground sprayer equipment.</p> <p>Postemergence applications may be made up to the 4 leaf stage of weed growth.</p>

Crop-Specific Restrictions:

- **DO NOT** use this product on papaya plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.
- **DO NOT** allow the herbicide solution, spray, drift or mist to contact green bark, stems, fruit or foliage as injury may result.
- **DO NOT** apply more than 2 pints (1.0 lb ai) per acre per application.
- **DO NOT** apply more than 6 pints (3.0 lb ai) per acre per year.
- **DO NOT** make more than 3 applications per acre per year.
- **Retreatment Interval:** 8 weeks

• Preharvest Interval (PHI): 1 day

Key Weeds Controlled:

Amaranth, Spiny Purslane, Common	Spurge, Garden
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**PEA, ORNAMENTAL SWEET, GROWN FOR SEED
(For Use Only in California)**

Ornamental sweet peas grown for seed are resistant to preemergence applications of LIBERTY OXYFLUORFEN 4L. However, under certain conditions, LIBERTY OXYFLUORFEN 4L can cause severe crop injury. Splashing rain or irrigation shortly after crop emergence or wet soil conditions during early growth stages can produce leaf cupping, crinkling, stunting, or defoliation of the ornamental sweet pea seedlings. When injury occurs, it is often limited to the first few leaves that develop shortly after plant emergence from the soil. Delays in crop development and/or maturity, and yield reduction may result.

DO NOT use LIBERTY OXYFLUORFEN 4L if the risk of crop injury is unacceptable. **DO NOT** use LIBERTY OXYFLUORFEN 4L on ornamental sweet pea plantings where seed lots are weakened or germinating seed are under stress due to temperature, disease, fertilizer-, soil, salts, nematodes, insects, pesticides, drought, excessive moisture, flooding, or soil crusting.

LIBERTY OXYFLUORFEN 4L must be applied at a rate of 0.25 – 0.5 pint (0.0125 - 0.25 lb ai) per acre as a preemergence application shortly after planting. Apply in a minimum of 20 gallons of water per acre, using a low pressure sprayer equipped with flat fan or hollow cone nozzles. **DO NOT** exceed 40 psi.

LIBERTY OXYFLUORFEN 4L provides preemergence suppression of the following weeds when used at specified rates:

Cheeseweed (Malva)	<i>Malva parviflora</i>
Groundsel, Common	<i>Senecio vulgaris</i>
Rocket, London	<i>Sisymbrium irio</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>

For optimum preemergence weed control, the soil surface must be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices which result in redistribution or disturbance of the soil surface or move untreated soil into treated areas will reduce weed control.

Use Restrictions:

- **DO NOT** apply more than 0.5 pint (0.25 lb ai) per acre per application.
- **DO NOT** apply more than 0.5 pint (0.25 lb ai) per acre per year.
- **DO NOT** make more than 1 application per year when using reduced application rates.
- **DO NOT** use plants treated with this product for feed or forage.
- **DO NOT** feed or allow animals to graze on any areas treated with this product.
- Apply only with ground application equipment.

**ROSES: FIELD-GROWN, ESTABLISHED PLANTINGS
(For Distribution and Use Only in the State of California)**

LIBERTY OXYFLUORFEN 2EC may be used as a post-directed application for control of certain broadleaf weeds in well-established rose plantings after bud grafted canes are at least 18 inches in length.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1 – 2 (0.5 – 1.0 lb ai)	For optimum preemergence weed control, the soil surface must be smooth and free of excessive trash (clippings, plant residues, etc.). Following application, cultural practices which result in redistribution or

		disturbance of the soil surface or move untreated soil into treated areas will reduce weed control.
Postemergence	1 – 2 (0.5 – 1.0 lb ai)	The lower rate is specified for the control of susceptible seedling weeds in the early postemergence stage, before the 4-leaf growth stage. The higher rate is advised for weeds at the 4-leaf growth stage. The addition of a labeled rate of a herbicide adjuvant may assist in spray coverage and postemergence activity. Applications to weeds beyond the 4-leaf growth stage may result in partial control

Precautions:

- Apply in 25 to 40 gallons of water per broadcast acre. Use a low-pressure sprayer with nozzles directed at the base of rose plants. Use spray shields to avoid spray contact with rose foliage. To minimize spray drift, use the lowest spray pressure suitable for the application equipment.
- This product must be applied only to roses with canes that are 18 inches or longer. Applications to rose plants with canes less than 18 inches in length may result in severe crop injury. Spray contact with foliage may cause severe crop injury and must be avoided. Leaves that are contacted by the spray will exhibit necrotic spotting and may drop from plant. Splashing rain or irrigation water or excessive soil moisture after application may result in leaf cupping, crinkling, stunting or defoliation.
- This product is phytotoxic to plant foliage. Avoid drift to nontarget areas. **DO NOT** apply when weather conditions favor drift.
- When applied as directed, field-grown roses are resistant to this product, but this has not been evaluated on all varieties, biotypes and cultivars of roses under all possible growing conditions. The user must exercise caution with this product. Until familiar with results under current growing conditions, limit application of this product to a few plants in a small area to-determine plant tolerance and potential for injury before initiating large-scale applications.
- Tank mixtures of this product with oils, liquid fertilizers or other pesticides may increase the potential for crop injury and are the responsibility of the user.

Use Restrictions:

- **DO NOT** apply more than 2 pints (1.0 lb ai) per acre per application
- **DO NOT** apply more than 4 pints (2.0 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per acre per year
- **Retreatment Interval:** 8 weeks of previous application
- **DO NOT** apply this product in enclosed greenhouse or lathhouse structures.
- **DO NOT** feed or graze animals on areas treated with this product.
- This product is phytotoxic to plant foliage. **DO NOT** apply when weather conditions favor drift to non-target areas.
- **DO NOT** apply this product to rose plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.
- **DO NOT** apply this product to roses through any type of irrigation system.

Weeds Controlled Pre-emergence:

Little Mallow (Cheeseweed)	<i>Malva parviflora</i>
Field Bindweed (Annual Morningglory)	<i>Convolvulus arvensis</i>
Morningglory, Ivyleaf	<i>Ipomoea hederacea</i>
Nightshade, Black	<i>Solanum nigrum</i>
Nightshade, Hairy	<i>Solanum physalifolium</i>
Nodding Beggarticks	<i>Bidens</i> spp
Redroot Pigweed	<i>Amaranthus retroflexus</i>

Weeds Controlled Postemergence:

Little Mallow (Cheeseweed)	<i>Malva parviflora</i>
Field Bindweed (Annual Morningglory)	<i>Convolvulus arvensis</i>

Morningglory, Ivyleaf	<i>Ipomoea hederacea</i>
Nightshade, Black	<i>Solanum nigrum</i>
Nightshade, Hairy	<i>Solanum physalifolium</i>
Redroot Pigweed	<i>Amaranthus retroflexus</i>

**SOYBEANS[*]
[Not for Use in California]**

Soybeans - Early Preplant Application in Conservation Tillage Systems		
Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	0.75 – 1.5 (0.375 – 0.75 lb ai)	<p>Early Preplant Application: Surface apply LIBERTY OXYFLUORFEN 4L to the stale seedbed approximately 14 days before planting conservation tillage soybeans for postemergence and preemergence residual broadleaf control. Use a spray volume of 20 or more gallons per acre and increase the spray volume if growth of existing weeds is dense. LIBERTY OXYFLUORFEN 4L at 1 to 1.5 pints (0.5 – 0.75 lb ai) provides early season suppression of annual grasses, but must not be relied upon as a basic grass herbicide. A planned program utilizing herbicides registered for early preplant, preemergence or postemergence grass control in soybeans is specified.</p> <p>Use of ridge or slot planter or a similar planting implement that causes minimal soil disturbance is specified. Movement or redistribution of surface soil will reduce herbicidal effectiveness.</p>

Soybeans: No-Till (Double-Crop)		
Application Timing for Target Weeds	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.25 – 1 (0.125 – 0.5 lb ai)	<p>Preemergence Application to Soybeans: Applied preemergence, LIBERTY OXYFLUORFEN 4L provides postemergence and residual preemergence control of susceptible broadleaf weeds. Apply LIBERTY OXYFLUORFEN 4L within one day after planting. Later applications may result in severe crop injury. Apply in a minimum spray volume of 20 gallons per acre and increase spray volume if growth of existing weeds is dense.</p>
<p>Tank Mixing: For enhanced postemergence control of existing grass and broadleaf weeds, LIBERTY OXYFLUORFEN 4L may be tank mixed with paraquat or glyphosate. For extended residual control of annual grasses no-till soybeans, this product may also be tank mixed with a residual grass herbicide.</p>		
Postemergence	0.5 (0.25 lb ai)	<p>Postemergence Directed Application: LIBERTY OXYFLUORFEN 4L may be applied as a post-directed application. Optimum control is achieved when LIBERTY OXYFLUORFEN 4L is applied to seedling weeds not exceeding 4 true leaves (not counting cotyledon leaves) and actively growing. Use an 80% nonionic surfactant cleared for application to growing crops at the rate of 2 pints (1.0 lb ai) per 100 gallons of spray whenever postemergence weed control is desired. For postemergence application,</p>

		Soybeans must be a minimum 8 inches tall. Use a minimum of 2 flat fan nozzles per row. Use branch lifters or shields to prevent excessive spray contact to the soybean plants. DO NOT use hollow cone nozzles.
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Soybeans: Grown Under Conventional Tillage Systems		
Application Timing for Target Weeds	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	0.5 – 0.75 (0.25 – 0.375 lb ai)	Preemergence Application to Soybeans: LIBERTY OXYFLUORFEN 4L provides preemergence control of susceptible broadleaf weeds. Apply LIBERTY OXYFLUORFEN 4L within one day after planting. Later applications may result in severe crop injury. Apply in a minimum spray volume of 20 gallons per acre and increase spray volume if growth of existing weeds is dense. The 0.75 pint (0.375 lb ai) per acre rate will assist in early season annual grass control but must not be relied upon as a basic grass herbicide. LIBERTY OXYFLUORFEN 4L may also be applied as a preemergence application following a preplant incorporated grass herbicide treatment.
Preemergence Tank Mixes (To Control Additional Grass and Broadleaf Weeds): Apply preemergence tank mixes of LIBERTY OXYFLUORFEN 4L within one day after planting. Later applications may result in severe crop injury. <ul style="list-style-type: none"> • This product at 0.3 to 0.75 pints (0.15 – 0.375 lb ai) per acre may be applied preemergence to soybeans in tank mix with Metolachlor or S-metolachlor. OXYFLUORFEN 4SC may be applied alone as a preemergence application following a preplant incorporated grass herbicide application or as a tank mix in a preemergence application with herbicides. Refer to the label of tank mix product for additional weeds controlled. • This product at 0.3 to 0.4 (0.15 – 0.2 lb ai) pints per acre may be applied preemergence to soybeans in tank mix with clomazone. Refer to the product label for additional weeds controlled. 		
Postemergence	0.5 (0.25 lb ai)	Postemergence Directed Sprays: LIBERTY OXYFLUORFEN 4L may be applied as a post-directed application at 0.5 pint (0.25 lb ai) per acre. Optimum control is achieved when weeds not exceed 4 true leaves and are actively growing (DO NOT count cotyledon leaves). Use of an 80% nonionic surfactant cleared for application to growing crops at the rate of 2 pints (1.0 lb ai) per 100 gallons of spray is advised whenever postemergence weed control is desired. For postemergence application, Soybeans must be a minimum 8 inches tall. Use a minimum of 2 flat fan nozzles per row. Use branch lifters or shields to prevent excessive spray contact to the soybean plants. DO NOT use hollow cone nozzles.
Postemergence Tank Mixes: For broader spectrum control of broadleaf weeds, LIBERTY OXYFLUORFEN 4L may be applied in tank mix with 2,4-DB. Use 0.5 pint (0.25 lb ai) of LIBERTY OXYFLUORFEN 4L with specified rate of 2,4-DB per acre. Refer to label of tank mix product for additional weeds controlled.		
Precautions (All Methods and Timings to Soybeans): <ul style="list-style-type: none"> • Soybeans are resistant to preemergence and post-directed applications of LIBERTY OXYFLUORFEN 4L at specified rates, however, under certain conditions injury may occur. Heavy splashing rain shortly after crop emergence or cold, wet soil conditions during early growth stages 		

can cause leaf cupping and crinkling. When injury occurs, it is limited to the first few leaves that develop after crop emergence. Soybeans recover from this injury and yields are not adversely affected. Soybeans accidentally sprayed during a post-directed application will exhibit necrotic spotting and injury to the soybean plant. Exercise care to avoid spray contact with the soybean leaves.

Crop-Specific Restrictions:

- **Tank Mixing:** It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
- **DO NOT** apply more than 1.5 pints (0.75 lb ai) per acre per application.
- **DO NOT** apply more than 1 pint (0.5 lbs ai) per acre per year as a result of preemergence application in no-till (double-crop) or conventional till soybeans, or postdirected in conventional till soybeans.
- If early preplant application is made, apply more than 1.5 pints (0.75 lb ai) per acre per year.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per year.
- **DO NOT** make more than 2 applications per year.
- **Retreatment Interval:** 8 weeks
- **DO NOT** apply a post-directed application of this product to soybeans after the initial appearance of blooms.

Key Weeds Controlled:

Preemergence	Postemergence
Groundcherry, Cutleaf ¹	Cocklebur, Common
Jimsonweed	Croton, Tropic
Lambsquarters, Common	Groundcherry, Cutleaf
Nightshade, American Black ¹	Groundcherry, Wright
Nightshade, Black ¹	Jimsonweed
Pigweed, Red Root	Lambsquarters, Common
Poinsettia, Wild	Morningglory, Annual (Up To 6 Leaf)
Shepherdspurse	Mustard, Wild
Sida, Prickly (Teaweed)	Nightshade, American Black
Smartweed, Pennsylvania	Nightshade, Black
Sowthistle, Common ¹	Nightshade, Hairy
Velvetleaf	Pigweed, Red Root
	Poinsettia, Wild ¹
	Purslane, Common
	Sesbania, Hemp
	Shepherdspurse
	Sicklepod ²
	Sida, Prickly (Teaweed) ¹
	Smartweed, Pennsylvania
	Velvetleaf

¹ Multiple applications may be required for acceptable control.

² Post-direct applications of this product will kill or suppress seedlings not exceeding the one true leaf stage.

TARO
(For Use Only in Hawaii)

For use only in dryland taro grown in Hawaii. Dryland taro is defined as taro grown without irrigation, or by using irrigation practices that **DO NOT** result in run-off, irrigation return flow, or other loss of irrigation water from the production area. If irrigation is used, the water applied shall not exceed the field capacity of the soil.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1 (0.5 lb ai)	Preemergence to Taro and Weeds: A single application of LIBERTY OXYFLUORFEN 4L at the rate of 1 pint (0.5 lb ai) per acre may be applied within 1 week after transplanting but prior to emergence of taro plants.
Postemergence	0.5 (0.25 lb ai)	Postemergence to Taro and Weeds: LIBERTY OXYFLUORFEN 4L may be applied as a post-directed or band application at the rate of 0.5 pint (0.25 lb ai) per acre. Effective control of succulent weed seedlings in the 2-to 3-leaf stage can usually be obtained. Applications to weeds beyond the 3-leaf stage may result in partial control.

Precautions:

- Accurate, uniform placement of this product is essential for effective weed control and to minimize crop injury. Taro foliage receiving accidental spray or drift will be injured. This product must be applied using rigid precision ground sprayer equipment.
- Occasionally, after the use of this product, spotting, crinkling or flecking may appear on the leaves of the taro. Leaves that receive direct or indirect (drift) spray contact will be injured.

Crop-Specific Restrictions:

- **DO NOT** use this product on taro plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.
- **DO NOT** apply more than 1 pint (0.5 lb ai) per broadcast acre per preemergence application.
- **DO NOT** apply more than 0.5 pint (0.25 lb ai) per acre in a single post-direct spray or more than 1 pint (0.5 lb ai) per acre per year as a result of multiple post-directed applications.
- **DO NOT** apply more than 2 pints (1.0 lb ai) per acre per year as a result of preemergence and post-direct applications.
- **DO NOT** make more than 2 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 10 weeks
- **Preharvest Interval (PHI):** 6 months of harvest of taro (corms, leaves).

Key Weeds Controlled:

Amaranth, Spiny
Purslane, Common
Spurge, Garden

TREE FRUIT / NUT / VINE CROPS (Dormant Application)

Pome Fruit Crop Group 11-10: Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these

Stone Fruit Crop Group 12-12: 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

Tree Nut Crop Group 14-12: 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

Miscellaneous: Avocado, Date, Feijoa, Fig, Grapes, Kiwi, Olives, Persimmon and Pomegranates

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence (broadcast application) (banded application)	2.5 – 3 (1.25 – 1.5 lb ai) 2.5 – 4 (1.25 – 2.0 lb ai)	Apply LIBERTY OXYFLUORFEN 4L a minimum of 20 gallons of water per acre. Use higher spray volumes to ensure thorough coverage in high densities of emerged weeds or heavy trash. Sprays must be directed to the soil and the base of dormant trees or vines. In California , LIBERTY OXYFLUORFEN 4L may be applied as an over-the-top or directed spray to dormant nonbearing grape plantings. The use of a low-pressure sprayer is suggested. DO NOT apply over-the-top to grape plantings that are under stress due to drought, flooding, excessive fertilizer or soil salts, storage conditions, wind injury, hail, injury from previously applied pesticides, or injury due to insects, nematodes, or diseases, as severe crop injury may result.
Postemergence (broadcast application) (banded application)	1 – 3 (0.5 – 1.5 lb ai) 1 – 4 (0.5 – 2.0 lb ai)	Apply in a spray volume of 40 or more gallons per acre. For optimum control, apply when weeds are at the seedling stage of growth. The lower rate in the rate range (1 pint or 0.5 lb ai per acre) is specified for the control of susceptible seedling weeds in the early postemergence stage up to the 4-leaf stage. Higher rates (up to 3 pints or 1.5 lb ai per acre) may be used for weeds up to the 6-leaf stage. Applications to weeds beyond the 6-leaf stage may result in partial control.
<p>Tank Mixing: Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply. See labels of tank mix partners to determine suitability and use rates for various crops.</p> <ul style="list-style-type: none"> • Postemergence: For broader spectrum postemergence control of listed grass and broadleaf weeds, this product may be applied in tank mix with paraquat or glyphosate. These herbicides may also be added to preemergence tank mixes for enhanced control of existing weeds. • Preemergence: For broad-spectrum preemergence control of susceptible grass and broadleaf weeds in listed tree fruit, nut or vine plantings, this product may be applied in tank mix with diuron, napropamide, norflurazon, oryzalin, pronamide or simazine. 		
<p>Chemigation (All States): For dormant season application using sprinkler (low-volume (micro sprinkler), drip (trickle), and flood (basin) irrigation systems, apply LIBERTY OXYFLUORFEN 4L at the specified rate per acre. Follow applicable directions in the Chemigation section of this label when making applications using irrigation systems.</p>		
<p>Precautions:</p> <ul style="list-style-type: none"> • This product or any of the combinations listed on this label must be applied to only healthy growing trees or vines. • Avoid direct plant contact. Direct spray toward the base of tree or vines unless specific use directions allow over-the-top application. 		
<p>Crop-Specific Restrictions:</p> <ul style="list-style-type: none"> • In all states, unless otherwise specified, DO NOT apply this product during the period between bud swell and completion of final harvest or when fruit/nuts are present. This product may be applied upon completion of final harvest. • In Arizona and California, this product may be applied during the period following completion of 		

final harvest up to February 15 (February 1st in the Coachella Valley, California). Applications made after these calendar dates, but prior to bud swell, may result in significant crop injury and are the responsibility of the user.

- **For banded applications, DO NOT** apply more than 4 pints (2.0 lb ai) per acre per year within the treated band.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per year on a broadcast basis.
- **DO NOT** apply more than 4 pints (2.0 lb ai) per acre per application.
- **DO NOT** make more than 3 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 2 weeks
- **DO NOT** apply to grapes or kiwi established less than 3 years unless vines are on a trellis wire a minimum of 3 feet above the soil surface.
- **DO NOT** apply to grapes or kiwi that are not staked or trellised unless vines are free standing.

Key Weeds Controlled (Arizona and California):

Preemergence	Postemergence
Burclover	Cheeseweed (Malva)
Cheeseweed (Malva)	Fiddleneck, Coast
Fiddleneck, Coast	Filaree, Broadleaf ¹
Filaree, Broadleaf	Filaree, Redstem ¹
Filaree, Redstem	Filaree, Whitestem ¹
Filaree, Whitestem	Groundsel, Common
Groundsel, Common	Henbit
Henbit	Minerslettuce
Knotweed, Prostrate	Nettle, Burning
Lambsquarters, Common	Pigweed, Redroot
Lettuce, Prickly	Redmaids
Pigweed, Redroot	Shepherdspurse
Purslane, Common	Sowthistle, Annual
Redmaids	
Rocket, London	
Shepherdspurse	
Sowthistle, Annual	

¹This product at the 6-pint rate will provide control of filaree not exceeding the 4-inch stage. Applications to filaree beyond the 4-inch stage may result in partial control.

Key Weeds Controlled (All Other States Except Arizona and California):

Preemergence	Postemergence
Camphorweed	Balsamapple
Cudweed, Narrowleaf	Cocklebur, Common
Eveningprimrose, Cutleaf ¹	Cudweed, Narrowleaf ²
Groundcherry, Cutleaf	Eveningprimrose, Cutleaf ¹
Jimsonweed	Groundcherry, Cutleaf
Lambsquarters, Common	Groundcherry, Wright
Nightshade, American Black	Jimsonweed
Nightshade, Black	Lambsquarters, Common
Pepperweed, Virginia	Morningglory, Annual
Pigweed, Red Root,	Nightshade, American Black
Poinsettia, Wild	Nightshade, Black
Sida, Prickly	Pepperweed, Virginia
Smartweed, Pennsylvania	Pigweed, Red Root
Sowthistle, Annual	Poinsettia, Wild
Spurge, Prostrate	Purslane, Common
Spurge, Spotted	Sesbania, Hemp
Velvetleaf	Shepherdspurse
	Sida, Prickly (Teaweed)

	Smartweed, Pennsylvania Sowthistle, Annual Velvetleaf
¹ Highest rate and/or multiple applications may be required for acceptable control.	
² Maximum 0.5-inch diameter.	

**APRICOTS, NECTRARINES, OLIVES, PEACHES, PLUMS AND PRUNES
(Non-Dormant Application)
(For Use Only in California)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Postemergence	0.25 – 0.5 (0.125 - 0.25 lb ai)	<p>LIBERTY OXYFLUORFEN 4L for postemergence suppression of the target weeds at 0.25 to 0.5 pint (0.125 to 0.25 lbs ai) per broadcast acre when applied to susceptible weed seedlings less than 4 inches in height. Repeat applications may be required.</p> <p>DO NOT exceed 3 pints (1.5 lbs ai) of LIBERTY OXYFLUORFEN 4L during the nondormant stage of apricots, nectarines, olives, peaches, plums and prunes.</p> <p>For a broader spectrum of grass weeds and broad leaf weeds control in the tree row middles, a tank mixture of LIBERTY OXYFLUORFEN 4L with either paraquat or glyphosate (Glyphogan) can be used. Read and follow the labeling of either the paraquat or glyphosate (Glyphogan) pesticide product which is to be tank mixed with LIBERTY OXYFLUORFEN 4L.</p> <p>Direct spray toward the base of the tree. Avoid direct herbicide contact with foliage and fruit</p>

Apricots, Nectarines, Olives, Peaches, Plums and Prunes in California

Nondormant Application

Specific Use Restrictions

- Read and observe all label directions before using. When tank mixing, always read all individual manufacturer labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.
- When applied as a non-dormant treatment, this product can only be applied to apricots, peaches, nectarines, plums and prunes after May 1. This product can only be applied as a non-dormant treatment to olives after bloom.
- **Preharvest Interval (PHI):** 14 days of harvest of fruit.
- **DO NOT** apply more than 3 pints (1.5 lbs ai) per broadcast acre per year during the non-dormant season.
- **DO NOT** apply more than 0.5 pints (0.25 lb ai) per acre per application postemergence.
- **DO NOT** make more than 4 applications per year when using reduced application rates.
- Apply this product only to healthy trees.

Product Information

LIBERTY OXYFLUORFEN 4L provides effective postemergence control of cheeseweed and other young broad leaf weed seedlings listed below in non-dormant apricots, nectarines, olives, peaches, plums and prunes. For enhanced post-emergence activity against these target weeds as well as other weed species, tank mixtures of LIBERTY OXYFLUORFEN 4L with either paraquat or glyphosate (can be used to increase the spectrum of weed control by either of these tank mix partners. Compatibility of each mixture

must be established before tank mixing and application must be applied by ground equipment. Follow all precautions and restrictions on the labeling of the products to be tank mixed.

Method of Application

Ground Application: Apply a minimum spray volume of 10 gallons of water per acre. Use higher volumes to ensure adequate coverage in high densities of emerged weeds or heavy trash. Use conventional low-pressure ground spray equipment with flat fan spray nozzles at 20 to 40 psi. An off-center nozzle positioned at the end of the boom can be used. Spray equipment calibrated carefully before each use.

Chemigation Application: Apply this product only through flood (basin) irrigation systems, or low-volume sprinkler (microsprinkler) and drip (trickle) irrigation systems designed to distribute irrigation water beneath the tree canopy. For additional information on these systems, see the APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION section of this label.

Cultural Considerations for All Applications: In order to provide maximum effectiveness of preemergence activity of LIBERTY OXYFLUORFEN 4L, the berm or soil surface level, smooth, and free of crop or weed trash (decaying leaves, clippings, dead weeds, etc.). Remove leaves and trash by blowing the area to be treated or by thoroughly mixing the trash into the soil through cultivation prior to herbicide applications.

Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of LIBERTY OXYFLUORFEN 4L. Cutting water furrows or cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment. The best results are from applications to established berms or soil surfaces that are left undisturbed during the time period for which weed control is desired.

**GRAPES (Non-Dormant Application)
(For Use Only in California)**

LIBERTY OXYFLUORFEN 4L may be applied as a directed spray or, for supplemental preemergence weed control, through low-volume sprinkler (micro sprinkler) or drip irrigation systems for control or suppression of listed broadleaf weeds in non-dormant grapes (raisin and wine grapes only). LIBERTY OXYFLUORFEN 4L may also be applied to all grapes (raisin, table, and wine) as a dormant season application. Refer to Tree Fruit/Nut/Vine Crops (Dormant Application) section above for use directions for dormant season application to grapes.

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	1 (0.5 lb ai)	LIBERTY OXYFLUORFEN 4L may be applied preemergence or postemergence to weeds either as a directed spray in a minimum spray volume of 20 gallons per acre or through low-volume sprinkler (micro-sprinkler) or drip irrigation systems. Repeat applications may be required. Applications may be made from completion of bloom up to 14 days before to harvest. When applied as a postemergence directed spray, add 1 quart 80% active nonionic surfactant cleared for application to growing crops per 100 gallons of spray. Sprays must be directed to the soil and the base of vines.
Postemergence	0.5 – 1 (0.25 – 0.5 lb ai)	

Tank Mixing:

When applied as a directed postemergence spray using ground equipment, this product may be applied in tank mix with paraquat or glyphosate in a minimum spray volume of 10 gallons per acre. Refer to Mixing Directions section for Tank Mixing Precautions. It is the pesticide user's responsibility to ensure that all products are registered for 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.

Chemigation: Follow chemigation instructions in Product Information section.

- Low Volume Sprinkler (Microsprinkler) and Drip (Trickle) Irrigation: Apply only through low-volume sprinkler or drip systems designed to uniformly distribute irrigation water beneath the canopy. Meter this product at a continuous rate during the middle 1/3 of the irrigation period and discontinue application during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system. Use of this product through low-volume sprinklers or drip emitters helps to reduce the "ring effect" of weed escapes in areas around sprinklers or emitters where previously applied broadcast or directed treatments begin to break down.

Precautions:

- **Crop Resistance:** The use of this product may result in varying degrees of injury to non-dormant grapes. Grape foliage will typically exhibit injury symptoms from direct or indirect (spray drift, soil contact) exposure. This injury may result in necrosis, reddening, cupping or crinkling of grape leaves. The grape plant will continue to grow normally. Grape leaves that are immature or expanding at the time of contact with this product are the most susceptible to foliage injury. Grapes may exhibit some small blemishes (spots or flecks) on the fruit.

Crop-Specific Use Restrictions:

- **DO NOT** apply more than 1 pint of (0.5 lb ai) per acre per application.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per year as a result of multiple applications in any given area (broadcast, banded, or within the wetted area of the low-volume sprinkler or drip irrigation system).
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **Preharvest Interval (PHI):** 14 days of harvest.
- **Retreatment Interval:** 4 weeks
- **DO NOT** initiate application of this product in non-dormant grapes until the completion of the bloom period.
- **DO NOT** apply to grapes established less than 3 years unless vines are either on a trellis wire a minimum of 3 feet above the soil surface, or protected by grow tubes.
- This product must be applied only by ground application equipment of through low-volume sprinkler (microsprinkler) or drip (trickle) irrigation systems.
- Apply this product as a non-dormant application to wine grapes or raisin grapes only.
- This product is phytotoxic to plant foliage. Avoid drift to all other crops and nontarget areas. **DO NOT** apply when weather conditions favor drift.

Key Weeds Controlled or Suppressed:

Preemergence	Postemergence
Burclover Cheeseweed, Malva Fiddleneck, Coast Groundsel, Common Henbit Knotweed, Prostrate Lambsquarters, Common Minerslettuce Mustard, Black Nettle, Burning Nightshade, Black Pigweed, Redroot Purslane, Common Redmaids Rocket, London Sowthistle, Annual	Cheeseweed (Malva) Fiddleneck, Coast Groundsel, Common Henbit Minerslettuce Morningglory Species, Annual Mustard, Black Nettle, Burning Nightshade, Black Pigweed, Redroot Purslane, Common Redmaids Rocket, London Sowthistle, Annual

**SUCKER CONTROL IN NON-DORMANT GRAPES
(Grapes for Wine and Processing Only)
(For Use Only in Washington and Oregon)**

Application Timing for Sucker Control	Rate (pt/acre)	Specific Use Directions
Grape suckers less than 12 inches in length	0.5 – 1 (0.25 – 0.5 lb ai)	Apply LIBERTY OXYFLUORFEN 4L in a three-foot band directed towards to newly emerging suckers at the base of the grapevine. The highest rate and/or a second application may be required to achieve an acceptable level of control/suppression of grape suckers. Avoid spray contact on flowers, grape clusters, or fruit. Use mounted nozzles to deliver the spray solution. Thorough spray coverage of sucker growth is essential for optimal activity. Use a spray volume of 50 or more gallons per acre (broadcast basis).

Tank Mixing: For enhanced postemergence sucker activity, a tank mixture of this product with either glufosinate or paraquat can be used. Apply at the specified rates and growth stages in a manner describe on the respective labels. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank-mixed products, the most restrictive label limitations must apply. It is the pesticide user's responsibility to ensure that all products are registered for 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.

Precautions:

- The use of this product may result in varying degrees of injury to non-dormant grapes. Grape foliage will typically exhibit injury symptoms from direct or indirect (spray drift or soil contact) exposure. This injury may result in necrosis, reddening, cupping or crinkling of grape leaves. The grape plant will continue to grow normally. Leaves that are immature or expanding at the time of contact with LIBERTY OXYFLUORFEN 4L are the most susceptible to injury. Grape fruit may exhibit some small blemishes (spots or flecks) on the fruit.

Crop-Specific Restrictions:

- **DO NOT** apply more than 1 pint (0.5 lb ai) per acre per application.
- **DO NOT** make more than 4 applications per acre per year.
- **DO NOT** apply more than (dormant and non-dormant) 3 pints (1.5 lb ai) per acre per year as a result of multiple applications in any give area (broadcast or banded).
- **Retreatment Interval:** 8 weeks
- This product must be applied only by ground application equipment.
- Apply this product as a non-dormant application for sucker control only to wine or processed grapes.
- **Preharvest Interval (PHI):** 60 days

**PISTACHIOS, WALNUTS, ALMONDS
(Non-Dormant Application)
(For Use Only in Arizona and California)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence	2.5 – 3 (1.25 – 1.5 lb ai)	Preemergence: For residual weed control of listed weeds.
Postemergence	0.5 – 1 (0.25 – 0.5 lb ai)	Postemergence (Suppression): Apply to seedling weeds less than 4 inches in height. Repeat applications may be required.
	1 – 3 (0.5 – 1.5 lb ai)	Postemergence (Cleanup): Contact (postemergence) control for cleanup sprays and preharvest applications.

		Apply to seedling weeds less than 4 inches in height. Applications to weed seedlings beyond the 4-inch stage may result in partial control.
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Tank Mixing: For broader spectrum grass and broadleaf weed control in tree row middles, LIBERTY OXYFLUORFEN 4L may be tank mixed with either paraquat or glyphosate. Refer to Mixing Directions section for Tank Mixing Precautions. Follow applicable use directions, precautions, and limitations on the respective product labels. In interpreting the labels of tank-mixed products, the most restrictive label limitations must apply.

Chemigation: Follow chemigation instructions in PRODUCT INFORMATION section.

- **Flood (Basin) Irrigation:** For flood (basin) irrigation systems, meter continuously into the water during the entire irrigation period. Best weed control results are obtained when a uniform distribution and flow of irrigation water is maintained over level land. Irrigation water treated with this product must be contained on the treated area until the water is absorbed by the soil.
- **Low Volume Sprinkler (Microsprinkler) and Drip (Trickle) Irrigation:** Apply only through low-volume sprinkler or drip systems designed to uniformly distribute irrigation water beneath the tree canopy. Applications must be made prior to weed emergence; otherwise postemergence activity may be inconsistent due to uneven coverage. Meter this product at a continuous rate during the middle 1/3 of the irrigation period and discontinue application during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system. Use of this product through low-volume sprinklers or drip emitters helps to reduce the "ring effect" of weed escapes in areas around sprinklers or emitters where previously-applied broadcast or directed treatments begin to break down.

Precautions:

- Direct spray toward the base of trees. Avoid direct contact with foliage or nuts.
- This product must be applied only to healthy growing trees

Crop-Specific Use Restrictions:

- When applied as a non-dormant treatment, this product can only be applied to pistachio plantings between May and 7 days prior to harvest.
- When applied as a non-dormant treatment, this product can only be applied to almond plantings between April 1 and September 30 and to walnut plantings between May 1 and September 30.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per application.
- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre during the non-dormant season.
- **DO NOT** make more than 3 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 2 weeks
- **Preharvest Interval (PHI):**
 - **Pistachios:** 7 days
 - **Almonds:** 30 days
 - **Walnuts:** 7 days

Key Weeds Suppressed and/or Controlled

Cheeseweed (Malva) Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Filaree, Whitestem Groundsel, Common Henbit Minerslettuce	Morningglory Species, Annual Mustard, Black Nettle, Burning Pigweed, Red Root Purslane, Common Redmaids Rocket, London Sowthistle, Annual
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Additional Weeds Controlled in Tank Mix with Glyphosate or Paraquat

Barnyardgrass Bluegrass, Annual Chickweed, Common	Horseweed (Marestail) Rocket, London Ryegrass, Italian
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**ALMONDS- REDUCED PREHARVEST INTERVAL
(For Use Only in California)
Nondormant Application with a 30 to 15 Day PHI**

Weed Control	Rate (pint/acre)	Specific Use Directions
Postemergence Suppression (seedlings less than 4 inches in height.)	0.25 (0.125 lb ai)	<p>LIBERTY OXYFLUORFEN 4L provides effective suppression of cheeseweed (Malva), fleabane and marestail (horseweed) as well as other weeds listed below in non-dormant almonds when applied to young broadleaf weed seedlings. For enhanced postemergence activity against these target weeds as well as other weed species, tank mixtures of This product with either paraquat or glyphosate may be used to increase the spectrum of weed control by either of these tank mix partners. Compatibility of each mixture must be established before tank mixing and application must be applied by ground equipment. Follow all precautions and restrictions on the labeling of the products to be tank mixed.</p> <p>For summer broadleaf weed control, apply no more than 2.5 pints (1.25 lbs. active) of LIBERTY OXYFLUORFEN 4L per broadcast acre prior to the February 15 cutoff. Then for summer use, apply no more than 0.25 pints (0.125 lb ai) per broadcast acre up to 30 days before harvest, and no more than 0.25 pints (0.125 lb ai) per broadcast acre between 30 and 15 days before harvest. For a broader spectrum of grass weeds and broadleaf weeds control in the tree row middles, a tank mixture of this product with either paraquat or glyphosate can be used. Read and follow the labeling of either the paraquat or glyphosate pesticide product which is to be tank mixed with this product.</p>
<p>Ground Application: Apply a minimum spray volume of 10 gallons of water per acre. Use higher volumes to ensure adequate coverage in high densities of emerged weeds or heavy trash. Use conventional low-pressure ground spray equipment with flat fan spray nozzles at 20 to 40 psi. Position an off-center nozzle at the end of the boom. Spray equipment calibrated carefully before each use.</p>		
<p>Chemigation Application: Apply this product only through flood (basin) irrigation systems, or low-volume sprinkler (microsprinkler) and drip (trickle) irrigation systems designed to distribute irrigation water beneath the tree canopy. For additional information on these systems, see the APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION section of this label.</p>		
<p>Cultural Considerations for All Applications: In order to provide maximum effectiveness of preemergence activity this product, the berm or soil surface must be level, smooth, and free of crop or weed trash (decaying leaves, clippings, dead weeds, etc.). Remove leaves and trash by blowing the area to be treated or by thoroughly mixing the trash into the soil through cultivation prior to herbicide applications.</p>		
<p>Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of this product. Cutting water furrows or cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment.</p>		
<p>Precautions:</p> <ul style="list-style-type: none"> • Apply this product only to healthy trees. • Direct spray toward the base of the tree. Avoid direct herbicide contact with foliage and fruit. <p>Restrictions:</p> <ul style="list-style-type: none"> • When applied as a non-dormant treatment, this product can only be applied to almonds between April 1 and September 30. 		

- **DO NOT** apply more than 0.25 pints (0.125 lb ai) broadcast per acre per application
- **DO NOT** apply more than 3 pints (1.5 lb ai) broadcast per acre during the nondormant period.
- In order to use 0.25 pints (0.125 lb ai) at 15 days before harvest, no more than 2.5 pints (1.25 lb ai) must have been applied within 60 days of harvest and no more than 0.25 pints (0.125 lb ai) must have been applied within 30 days of harvest.
- **DO NOT** apply more than 3 pints (1.5 lb ai) broadcast per acre in one year.
- **DO NOT** make more than 4 applications per year when using reduced application rates.

Weeds Suppressed and/or Controlled

Cheeseweed (Malva) Fiddleneck, Coast Filaree, Broadleaf Filaree, Redstem Filaree, Whitestem Groundset, Common Henbit Miner's Lettuce	Morningglory Species, Annual Mustard, Black Nettle, Burning Pigweed, Redroot Purslane, Common Redmaids Rocket, London Sowthistle, Annual
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Additional Weeds Controlled in Tank Mix with Glyphosate or Paraquat

Barnyardgrass Bluegrass, Annual Chickweed, Common Fleabane	Horseweed (Marestail) Rocket, London Ryegrass, Italian
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**WINDBREAKS AND SHELTERBELTS
(For Use Only in Minnesota, North Dakota, South Dakota and Wyoming)**

Weed Control	Rate (pt/acre)	Specific Use Directions
Preemergence Postemergence	2 – 3 (1.0 – 1.5 lb ai)	<p>Apply LIBERTY OXYFLUORFEN 4L may be applied as a broadcast, banded or post-directed spray. Preemergence control is most effective when spray is applied to clean, weed-free soil surfaces. Pre-transplant applications must be made after completion of soil preparation but prior to transplanting. Transplanting must be completed with minimal soil disturbance. For optimum weed control results, treated soil surfaces must be left undisturbed during the time period for which weed control is desired.</p> <p>Postemergence Weed Control: For best results, apply before the 4-leaf stage for broadleaf weeds or 2-leaf stage for grass weeds.</p> <p>Conifers: LIBERTY OXYFLUORFEN 4L can be applied pre-transplant, post-directed or postemergence (over-the-top) to conifers. Postemergence or post-directed applications must be applied prior to budbreak or after new growth foliage has hardened off and new terminal buds have formed.</p> <p>Deciduous Hardwoods: LIBERTY OXYFLUORFEN 4L has exhibited selectivity to many deciduous species when applied pre-transplant or as a post-directed spray prior to budbreak.</p>

Precautions:

- Important: Some varieties or cultivars of conifers or deciduous species listed may be susceptible to this product. Care must be taken to ensure that the particular variety to be sprayed with LIBERTY OXYFLUORFEN 4L is tolerant. For unfamiliar species, it is suggested that this product be tested on a limited number of plants prior to large-scale application.
- Occasionally after the use of this product, a spotting, crinkling or flecking may appear on the leaves of the deciduous species. Leaves that receive direct or indirect (drift) spray contact will be injured. Deciduous species typically rapidly outgrow these symptoms and develop normally.
- Application after budbreak may result in injury to deciduous species. If non-dormant application is required, apply only after foliage has fully expanded and hardened off. Avoid direct or indirect spray contact with the foliage by applying to the soil surface as a directed spray.
- Apply this product only to healthy deciduous and/or conifer trees.

Specific Use Restrictions for Shelterbelts:

- **DO NOT** apply more than 3 pints (1.5 lb ai) per acre per application
- **DO NOT** apply more than 9 pints (4.5 lb ai) per acre per year.
- **DO NOT** make more than 4 applications per acre per year when using reduced application rates.
- **Retreatment Interval:** 8 weeks
- **DO NOT** apply this product to conifers or deciduous trees that have been weakened or under stress from excessive fertilizer or soil salts, disease, nematodes, frost, drought, flooding, previously applied pesticides, soil insects, or winter injury, as severe injury may result.

Key Broadleaf Weeds Controlled:

Buckwheat, Wild	Mustard, Wild
Burclover	Nettle, Burning
Carpetweed	Nightshade, Black
Dock, Curly	Nightshade, Hairy
Groundcherry, Cutleaf	Oats, Wild
Groundcherry, Wright	Orach, Red
Groundsel, Common	Pepperweed, Yellow Flower
Henbit	Pigweed, Prostrate
Jimsonweed	Pigweed, Red Root
Knotweed, Prostrate	Purslane, Common
Kochia	Rocket, London
Ladysthumb	Shepherdspurse ¹
Lambsquarters, Common	Smartweed, Pennsylvania
Lettuce, Prickly	Sowthistle, Annual
Mallow, Little	Tansymustard
Mayweed	Thistle, Russian (Seedling)
Mustard, Blue	Velvetleaf
Mustard, Tumble	

¹The highest rate or multiple applications may be required for acceptable control.

Key Grasses Controlled:

Barnyardgrass	Foxtail, Giant
Bluegrass, Annual	Goosegrass
Crabgrass, Large	Witchgrass

LIBERTY OXYFLUORFEN 4L may be applied to numerous conifer and deciduous species, including the following:

Conifer Species

Common Name	Scientific Name
Douglas-fir	<i>Pseudotsuga menziesii</i>
Fir	
Grand	<i>Abies grandis</i>
Fraser	<i>Abies fraseri</i>
Noble	<i>Abies procera</i>

Hemlock Eastern Hemlock Western Hemlock	<i>Tsuga canadensis</i> <i>Tsuga heterophylla</i>
Pine Austrian Eastern White Jack Himalayan Loblolly Lodgepole Longleaf Monterey Mugo Ponderosa Scotch Shortleaf Slash Virginia	<i>Pinus nigra</i> <i>Pinus strobus</i> <i>Pinus banksiana</i> <i>Pinus griffithii</i> <i>Pinus taeda</i> <i>Pinus contorta</i> <i>Pinus palustris</i> <i>Pinus radiata</i> <i>Pinus mugo</i> <i>Pinus ponderosa</i> <i>Pinus sylvestris</i> <i>Pinus echinate</i> <i>Pinus elliotii</i> <i>Pinus virginiana</i>
Spruce Blue Dwarf Alberta Norway Sitka	<i>Picea pungens</i> <i>Picea glauca Conica</i> <i>Picea abies</i> <i>Picea sitchensis</i>
Arborvitae	<i>Thuja occidentalis</i> <i>Thuia orientalis</i>
Juniper	<i>Juniperus chinensis</i> <i>Juniperus horizontalis</i> <i>Juniperus procumbens</i> <i>Juniperus sabina</i> <i>Juniperus scopulorum</i>
Red cedar	<i>Juniperus virginiana</i>
Yew	<i>Taxus</i> spp.

Deciduous Hardwood Species

Common Name	Scientific Name
Ash	<i>Fraxinus</i> spp.
Crabapple	<i>Malus</i> spp.
Eucalyptus	<i>Eucalyptus</i> spp.
Lilac	<i>Syringa vulgaris</i>
Maple, Black	<i>Acer nigrum</i>
Oak, Northern Red	<i>Quercus rubra</i>
Olive, Russian	<i>Elaeagnus angustifolia</i>
Poplar (Cottonwood)	<i>Populus</i> spp.
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Platanus occidentalis</i>
Walnut, Black	<i>Juglans nigra</i>

STORAGE AND DISPOSAL

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

Pesticide Storage: Keep container tightly closed when not in use. Keep from freezing. Store above 32°F.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used must be disposed on a landfill approved for pesticides. 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] NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[PLASTIC] NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows (all sizes): 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.

[PLASTIC] REFILLABLE CONTAINER: Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. After triple rinsing is complete, and the container is not suitable for refilling or reconditioning, offer the container for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONDITION 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 must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of LIBERTY CROP PROTECTION, LLC or 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 LIBERTY CROP PROTECTION, LLC and Seller harmless for any claims relating to such factors.

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