



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg. Number:

82542-13

Date of Issuance:

MAY 14 2009

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance: conditional

Name of Pesticide Product:

Oxyfluorfen 4 SC Herbicide

Name and Address of Registrant (include ZIP Code):

Source Dynamics, LLC
10039 E. Troon North Dr.
Scottsdale, AZ 85262

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

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
2. Submit the data listed below:
 - a. Within 6 months of the date of this Notice of Registration, submit:
 1. 830.1300 Enforcement Analytical Method
 2. 830.6314 Oxidation/Reduction
 Please see enclosed product chemistry review for additional details
3. Make the following label changes:
 - a. Add the EPA Registration number, 82542-13
 - b. Remove the comma after the words "fallow bed" in the listing of uses, so that the listing will read, "fallow bed (cotton/soybeans)."
 - c. Precautionary Statements: Remove the statement, "Prolonged or frequently repeated....individuals."

Signature of Approving Official:

Joanne I. Miller
Product Manager 23
Herbicide Branch
Registration Division (7505P)

Date:

MAY 14 2009

d. Personal Protective Equipment: Add the following language at the beginning of this section, immediately after sentence beginning, "If you want more options....":

i. "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"

ii. Add, "All other mixers, loaders," in front of "applicators and other handlers must wear:"

e. Engineering Controls:

ii. Add, "Engineering Controls" above the section beginning, "When handlers use closed systems...."

iii. Add, "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' I 70.240(d)(6)] to the Engineering Controls section."

iv. Add, "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)J, 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, such as a broken package, spill, or equipment breakdown, coveralls and chemical-resistant footwear.

f. User Safety Recommendations:

v. Modify the text in this box to read as follows:

"Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove contaminated 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."

g. Environmental Hazards:

i. Modify text to read, "This product is toxic to aquatic invertebrates and wildlife. Do not apply directly to water, 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 rinseate.”

h. Agricultural Use Requirements:

i. Add the following text:

“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
- Conifer seedlings: The REI is 3 days
- Conifer trees: The REI is 6 days

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

- coveralls,
- chemical-resistant gloves made of any waterproof material,
- shoes plus socks

i. Non-Agricultural Use Requirements:

i. Modify the re-entry statement to the following:

“Do not enter or allow others to enter until sprays have dried.”

j. The following maximum rates (per the oxyfluorfen RED) must be reflected in the directions for use, both general and crop-specific:

Maximum Annual Application Rates Restrictions:

- All Food/Feed Crops (except tropical commodities grown in HI): 1.5 lbs ai/A
- All ornamentals: liquid application rate of 1.5 lbs/ai/application (4.5 lbs ai/season)
- Container-grown ornamentals: granular application rate of 2 lbs ai/A/application (6 lbs ai/season).
- Conifer seedlings: 2 lbs/ai/A.

This means that the maximum application rate for food/feed crops is 3 pints per acre, and for ornamentals, it is 3 pints per acre per application; some of the current labeling specifies up to 4 pints per acre, and must be modified.

k. General Use Restrictions:

i. Add the following statement, “Do not apply Oxyfluorfen 4SC in enclosed greenhouses as foliage injury will result.”

ii. Add the following section, “Spray Drift Buffer Restrictions V:

1. 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.

2. 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 reaction areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.
3. For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy when wind speed is 10 mph or less at the application site as measured by an anemometer.
4. Use coarse spray according to ASAE 572 definition for standard nozzles or VMD of 475 microns for spinning atomizer nozzles.
5. The applicator also must use all other measures necessary to control drift.

iii. Remove the words, "or fallow field" at the end of the Rotation Crop Restrictions section. This label specifies fallow bed use, not fallow land/field uses.

l. Ensure that the following language regarding application instructions and cultural practices appears on the label:

i. Preemergence Weed Control

Apply the recommended 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 Oxyfluorfen 4SC 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 should 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 Oxyfluorfen 4SC and should occur within 3 or 4 weeks after application. For optimum results, Oxyfluorfen 4SC should 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 Oxyfluorfen 4SC such as 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.

ii. Postemergence Weed Control

Apply the recommended rate in a broadcast spray volume of 20 or more gallons of water per acre (a minimum 10 gallons if applying Oxyfluorfen 4SC in tank mix with glyphosate). Because Oxyfluorfen 4SC 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 Oxyfluorfen 4SC 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 should 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.

iii. Ground Application

Ground Broadcast: Apply Oxyfluorfen 4SC using conventional low-pressure ground spray equipment with flat fan spray nozzles. Follow manufacturer's recommendation for spraying pressure and boom height.

An off-center (CC) nozzle positioned at the end of the boom may be desired. Check calibration of spray equipment before each use.

Directed Sprays: Apply Oxyfluorfen 4SC as a coarse low-pressure spray in a spray volume of 20 or more gallons of spray per acre (broadcast basis). Follow manufacturer's recommendations for nozzle spacing and operating pressure.

Spray should 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 should point forward and downward while the rear nozzles should point to the rear and downward. With either sprayer system, nozzles should be adjusted to cover the weed foliage but minimize contact with the crop. Do not apply with hollow cone nozzles.

IMPORTANT: Oxyfluorfen 4SC 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 should be reduced according to the following formula:

Band Width (in inches) X Rate per = Amount Needed per Acre
Row Width (in inches) Broadcast Acre for Banded Application

iv. 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 Oxyfluorfen 4SC with the recommended amount of water. For preemergence weed control, use one-half to one gallon of spray per 1000 sq ft. For postemergence weed control use a minimum of 1 gallon of spray per 1000 sq ft and add an 80% nonionic surfactant at the rate of 0.5 fl oz (1 Tbs) 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 Oxyfluorfen 4SC Required to Treat 1000 sq ft at Specified Application Rate

0.25 pt/acre 0.5 pt/acre 1.0 pt/acre 1.5 pt/acre 2.0 pt/acre 4.0 pt/acre j
0.1 fl oz 0.2 fl oz 0.4 fl oz 0.55 fl oz 0.75 fl oz 1.5 fl oz
(2.75 ml) (5.5 ml) (11 ml) (16.5 ml) (22 ml) (44 ml)

1 pint= 16fl oz; 1 fl oz=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 Oxyfluorfen 4SC 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.

v. Spray Drift Management (Aerial Application): Avoiding spray drift at the application site is the responsibility of the applicator. The potential for spray drift is controlled by the interaction of many equipment-and-weather-related factors. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

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

The applicator must adhere to the following requirements when Oxyfluorfen 4SC is aerially applied:

1. Do not apply when the wind direction is not stable, when inversion conditions exist, or when wind velocity exceeds 10 mph.
2. 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 the following: • 150 feet from dormant treefruit/nut/vine crops and overwintering sugar beets.

- 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seedling sugar beets, and non-targeted 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 non-targeted vegetable fallow bed, crop, or desirable vegetation.

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

Important: Aerial applicators must be familiar with the label for Oxyfluorfen 4SC and follow all applicable use precautions. Applying Oxyfluorfen 4SC in a manner other than recommended in this label is done at the users

Users are responsible for all loss or damage resulting from aerial spraying. In addition, aerial applicators should follow all applicable state and local regulations and ordinances. In interpreting the label

local regulations, the most restrictive limitations apply.

vi. Chemigation Instructions

Do not apply this product through any irrigation system unless the instructions for chemigation are followed. Do not apply Oxyfluorfen 4SC through chemigation equipment unless chemigation is allowed by Crop-Specific Use Directions.

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. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact 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 should the need arise.

Sprinkler Chemigation (Foliar Spray Uses)

sprinkler irrigation, sufficient water should be applied at the beginning of the irrigation period to insure uniform wetting of the plant and/or soil surfaces. Meter Oxyfluorfen 4SC into the sprinkler irrigation system at 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 should 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

other crops or desirable vegetation. Use the following guidelines when

applications of Oxyfluorfen 4SC 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 ½ mile from all crops and desirable vegetation, except for the following: Maintain a minimum downwind buffer zone of:

- 150 feet from dormant treefruit, 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.

When applying 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, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Flood (Basin) Chemigation (Soil Drench Uses):

Oxyfluorfen 4SC should be continuously metered into the water during the entire irrigation period. Agitation in pesticide supply tank is suggested. Best weed control results from Oxyfluorfen 4SC 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 such as 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, such as a positive displacement/injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Drip (Trickle) Chemigation (Soil Drench Uses) To achieve optimum distribution of Oxyfluorfen 4SC in the soil surface, meter Oxyfluorfen 4SC at a Continuous uniform rate during the middle 1/3 of the irrigation period. For best results, Oxyfluorfen 4SC should 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 such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Chemigation Calibration: For Low-Volume Sprinklers (Micro-sprinklers) 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 OXYFLUORFEN 4SC, 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 $B = A \times \text{emitters/acre}$
144

Example: If there are 300 emitters per acre, then

$$B = 530.7 \times 300 = B 1105.6 \text{ square feet wetted per acre}$$

$$144$$

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

$$C = 1105.6 \text{ square feet per acre} \times 20 \text{ acres}$$

$$C = 22,112 \text{ square feet wetted by system}$$

4. Amount of OXYFLUORFEN 4SC to inject = S

Rate per treated acre of OXYFLUORFEN 4SC = R

$$S = C \times R = \text{pints of OXYFLUORFEN 4SC}$$

$$43,560$$

Example: If the desired application rate per treated acre is 1 quart of OXYFLUORFEN 4SC, then $S = 22,112 \times 1.0 = S = 0.507$ pints of OXYFLUORFEN 4SC should be injected into system. 43,560

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 should 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, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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 recommended amount of herbicides to the spray tank. The order of addition to spray tank should be (1) wettable powders, (2) flowables and (3) soluble liquids. Complete filling of spray tank with water.

Use of Surfactants: For all applications of Oxyfluorfen 4SC 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 recommended 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.

Do not exceed recommended 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: A jar test is recommended 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 should 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 Oxyfluorfen 4SC 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 recommended to aid in removal of residues of Oxyfluorfen 4SC.

- m. On page 31, add the words, "Sucker Control in Nondormant ..." before "Grapes (Washington and Oregon Only).
- n. On page 33, correct the spelling of "Shelterbelts" in section header.
- o. Update Warranty Statement per EPA guidance of October 17, 2006, such as the following:

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of XXXX. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, XXX makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of XXX is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, XXX disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at XXX's election, the replacement of product.

- p. Submit one copy of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Oxyfluorfen 4 SC

Herbicide

Use Directions For: artichokes (globe), broccoli/cabbage/cauliflower, cacao, citrus (non-bearing), coffee, conifer (seedbeds, transplants, container stock) and selected deciduous trees, cotton, cottonwood, eucalyptus, fallow bed, (cotton/ soybeans), garbanzo beans, garlic, guava (Hawaii only), horseradish, jojoba, mint, onions, onions grown for seed, papaya (Hawaii only), taro, treefruit/nut/vine

Active Ingredient

oxyfluorfen: 2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4-(trifluoromethyl)benzene	41%
Inert Ingredients	59%
Total	100%

Contains 4 pounds active ingredient per gallon

Shake Well Before Using

EPA Reg. No. 82542-x EPA Est. No.:

Keep Out of Reach of Children

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)

CAUTION PRECAUCION

Precautionary Statements

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE):

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

ACCEPTED
with COMMENTS
in EPA Letter Dated

MAY 14 2009

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

82542-13

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 (>14 mils) such as: Barrier Laminate, Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Natural Rubber, Polyethylene, Polyvinyl Chloride (PVC), or Viton
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing or loading

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, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

User Safety Recommendations

Users should:
 Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
 Remove contaminated clothing and wash clothing before reuse.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters. This product is highly toxic to aquatic invertebrates, aquatic plants, wildlife and fish. Use with care when applying in areas frequented by wildlife or adjacent to any body of water or wetland area. Do not apply when weather conditions favor drift or erosion from target areas. Runoff may be hazardous to aquatic organisms in neighboring areas.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

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 with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides.

It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

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

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material (>14 mils) such as; Barrier Laminate, Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Natural Rubber, Polyethylene, Polyvinyl Chloride (PVC), or Viton
- Chemical-resistant headgear for overhead exposure

Non-Agricultural Use Requirements:

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

- Keep unprotected persons out of treated area until sprays have dried.

Storage and Disposal:

Do not contaminate water, food or feed by storage or disposal

Storage: Keep from Freezing. Store above 32°F

Pesticide Disposal: Pesticide Wastes are toxic. 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 Disposal

Plastic Containers: Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Metal Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Steps to be taken In Case Material Is Released or Spilled; Dike the spill with inert material (sand, earth, etc.) and transfer the liquid or solid diking material to separate containers for recovery or disposal. Remove contaminated clothing promptly and wash exposed skin areas with soap and water. Wash clothing before reuse. Keep spill out of all sewers and bodies of water.

GENERAL USE INFORMATION

Oxyfluorfen 4SC herbicide may be applied for preemergence and postemergence weed control in labeled crops as indicated in this label. All use directions as provided in the General Use Information section and crop-specific sections of this label, must be followed.

GENERAL USE RESTRICTIONS: THE FOLLOWING USE RESTRICTIONS APPLY TO ALL REGISTERED USES OF THIS PRODUCT:

(NOTE: SEE DIRECTIONS FOR USE FOR INDIVIDUAL CROPS FOR CROP-SPECIFIC USE RESTRICTIONS.)

- Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.
- Do not contaminate irrigation water or water used for domestic purposes.
- Do not use any plants treated with Oxyfluorfen 4SC for feed or forage. Do not feed or allow animals to graze on any areas treated with Oxyfluorfen 4SC.
- Oxyfluorfen 4SC should be applied only by ground application equipment except as otherwise allowed or directed in specific use directions. Do not apply when weather conditions favor drift. Avoid drift to all non-target areas. Oxyfluorfen 4SC is phytotoxic to plant foliage. Thoroughly flush spray equipment (tank, pump, hoses and boom) with clean water before and after each use. Residual Oxyfluorfen 4SC remaining in spray equipment may damage other crops. To assist removal of Oxyfluorfen 4SC residues in spray equipment, a non-ionic surfactant may be added at the rate of 1 quart per 100 gallons of water during flushing.
- Use Oxyfluorfen 4SC only for recommended purposes and at recommended rates.
- Do not treat ditch banks or waterways with Oxyfluorfen 4SC.

ROTATION 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 a Oxyfluorfen 4SC treatment.

Do not direct seed any crops, other than Oxyfluorfen 4SC-labeled crops, within 60 days following a treatment with Oxyfluorfen 4SC.

Do not transplant seedling crops, other than Oxyfluorfen 4SC-labeled crops, within 30 days following treatment with Oxyfluorfen 4SC. IMPORTANT: TREATED SOIL MUST BE THOROUGHLY INCORPORATED 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 THIS THOROUGH AND COMPLETE INCORPORATION OR TO FOLLOW THE REQUIRED MINIMUM PLANT-BACK INTERVAL MAY RESULT IN CROP INJURY, STAND REDUCTION AND/OR YIELD REDUCTION OF THE PLANT-BACK CROP. See specific fallow bed labeling regarding crop planting information for applications of Oxyfluorfen 4SC that are made to a fallow bed or fallow field.

WEEDS LISTED

AGÉRATUM
 AMARANTH, SPINY
 BALSAMAPPLE
 BARNYARDGRASS (WATERGRASS)
 BEDSTRAW, CATCHWEED
 BITTERCRESS, LESSER BLUEGRASS,
 ANNUAL
 BUCKWHEAT, WILD
 BURCLOVER
 BUTTERCUP, SMALLFLOWER
 BUTTONWEED CAMPHORWEED
 CANARYGRASS (ANNUAL)
 CARPETWEED
 CHEESEWEED (MALVA)
 CLOVER, RED
 CLOVER, WHITE
 COCKLEBUR, COMMON
 CRABGRASS, LARGE (HAIRY)
 CROTALARIA
 CROTON, TROPIC
 CUDWEED, NARROWLEAF
 EVENINGPRIMROSE, CUTLEAF
 FIDDLENECK, COAST
 FILAREE, BROADLEAF
 FILAREE, REDSTEM
 FILAREE, WHITESTEM
 FIREWEED (FROM SEED)
 FLIXWEED
 FOXTAIL, GIANT
 GERANIUM, CAROLINA
 GOOSEGRASS
 GROUNDCHERRY, CUTLEAF
 GROUNDCHERRY, WRIGHT
 GROUNDSEL, COMMON
 HENBIT
 HORSEWEED (MARESTAIL)
 JIMSONWEED JOHNSONGRASS,
 SEEDLING KNOTWEED,
 PROSTRATE LADYSTHUMB
 (SMARTWEED)
 LAMBSQUARTERS, COMMON
 LETTUCE, PRICKLY
 (CHINA LETTUCE) MALLOW,
 LITTLE (MALVA) MA YWEED
 (DOG FENNEL)
 MINERSLETTUCE
 MORNINGGLORY SPECIES,
 ANNUAL MORNINGGLORY,
 IVYLEAF MORNINGGLORY,
 TALL MUSTARD, BLACK
 MUSTARD, BLUE(PURPLE
 MUSTARD)
 MUSTARD, COMMON YELLOW
 MUSTARD, HEDGE
 MUSTARD, TUMBLE (JIM HILL
 MUSTARD)
 MUSTARD, WILD
 NETTLE, BURNING
 NIGHTSHADE, AMERICAN BLACK
 NIGHTSHADE, BLACK NIGHTSHADE,
 HAIRY

Ageratum *ides*
Amaranthus spinosus
Momordica charantia
Echinochloa crus-galli
Galium aparine
Cardamine oligosperma
Poa annua
Polygonum convolvulus
Medicago hispida
Ranunculus abortivus
Borreria alata
Heterotheca subaxillaris
Phalaris canariensis
Mol/ugo verticillata
Malva parviflora
Trifolium pratense
Trifolium repens Xanthium
pensylvanicum Digitalia
sanguinalis Crotalaria
species Croton
glandulosus Gnaphalium
falcatum Oenothera
laciniata Amsinckia
intermedia Erodium botrys
Erodium cicutarium
Erodium moschatum
Epilobium angustifolium
Descurainia sophia
Setaria taberi
Geranium carolinianum
Eleusine indica
Physalis angulata
Physalis wrightii
Senecio vulgaris
Lamium amplexicaule
Conyza canadensis
Datura stramonium
Sorghum halepense
Polygonum aviculare
Polygonum persicaria
Chenopodium album
Lactuca serriola

Malva parviflora
Anthemis cotula
Montia perfoliata
Ipomoea species

Ipomoea hederacea
Ipomoea purpurea
Brassica nigra
Chorispora tenella

Brassica campestris
Sisymbrium officinale
Sisymbrium affissimum

Brassica kaber
Urtica urens
Solanum americanum
Solanum nigrum
Solanum sarrachoides

OATS, WILD
 ORACH, RED
 OXALIS (BERMUDA BUTTERCUP)
 PEPPERWEED, VIRGINIA
 PEPPERWEED, YELLOWFLOWER
 PIGWEED, PROSTRATE PIGWEED,
 RED ROOT PIMPERNEL, SCARLET
 POINSETTIA, WILD PUNCTUREVINE
 PURSLANE, COMMON
 RUSLEY, FLORIDA
 RAGWEED, COMMON
 REDMAIDS
 ROCKET, LONDON
 RYEGRASS, ITALIAN
 SAGE, LANCELEAF
 SANDSPURRY, RED
 SESBANIA, HEMP
 SHEPHERDSPURSE
 SICKLEPOD
 SIDA, PRICKLY (TEAWEED)
 SMARTWEED, PENNSYLVANIA
 SORREL, RED (FROM SEED)
 SOWTHISTLE, ANNUAL
 SPEEDWELL, BIRDSEYE
 SPURGE, GARDEN
 SPURGE, PROSTRATE
 SPURGE, SPOTTED
 SPURRY, CORN
 TANSYMUSTARD
 THISTLE, BULL
 THISTLE, RUSSIAN
 VELVETLEAF
 WITCHGRASS
 WITCHWEED
 WOODSORREL, COMMON YELLOW

Avena fatua
Atriplex rosea
Oxalis pes-caprae
Lepidium virginicum
Lepidium perfoliatum
Amaranthus blitoides
Amaranthus retroflexus
Anagallis arvensis
Euphorbia heterophylla
Tribulus terrestris
Portulaca oleracea
Richardia scabra
Ambrosia artemisiifolia
Calandrinia caulescens
Sisymbrium irio
Lolium multiflorum
Salvia reflexa
Spergularia rubra
Sesbania exaltata
Capsella bursa-pastoris
Cassia obtusifolia
Sida spinosa
Polygonum pensylvanicum
Rumex acetosella Sonchus
oleraceus Veronica persica
Euphorbia hirta
Euphorbia supina
Euphorbia maculata
Spergula arvensis
Descurainia pinnata
Cirsium vulgare
Salsola kali
Abutilon theophrasti
Panicum capillare
Striga asiatica
Oxalis stricta

CHEMIGATION

Do not apply this product through any irrigation system unless the instructions for chemigation are followed. **If application by chemigation is not specifically listed under the specific crop use instructions, Oxyfluorfen 4SC may not be applied to that crop through an irrigation system.**

Apply this product only through sprinkler (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. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact 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 should a problem arise.

SPRINKLER CHEMIGATION (FOLIAR SPRAY USES)

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, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

For sprinkler irrigation, sufficient water should be applied at the beginning of the irrigation period to insure uniform wetting of the plant and/or soil surfaces. Meter Oxyfluorfen 4SC at a continuous uniform rate during the middle 1/3 of the irrigation period to allow for uniform distribution to the vegetation 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 should be applied to insure water penetration to a depth of two inches.

FLOOD (BASIN) CHEMIGATION (SOIL DRENCH USES)

Oxyfluorfen 4SC should be continuously metered into the water during the entire irrigation period. Agitation in the pesticide supply tank is suggested. Best weed control results from Oxyfluorfen 4SC 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 such as 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, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

DRIP (TRICKLE) CHEMIGATION (SOIL DRENCH USES)

Meter Oxyfluorfen 4SC at a continuous uniform rate during the middle 1/3 of the irrigation period to allow for uniform distribution to the soil surface. For best results, Oxyfluorfen 4SC should be uniformly positioned across the wetted area to help reduce the "ring effect" of weed escapes, as other products begin to break down around the emitter. 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 such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

CHEMIGATION CALIBRATION: FOR LOW-VOLUME SPRINKLERS (MICRO SPRINKLERS) 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 Oxyfluorfen 4SC, 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

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

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

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

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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 = 530.7×300 = B = 1105.6 square feet wetted per acre 144

3. The total area (in square feet) wet by your system = C
C = B X acres covered by system

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

4. Amount of Oxyfluorfen 4SC to inject = S Rate

per treated acre of Oxyfluorfen 4SC = R S = $\frac{C}{R}$

$\frac{C}{R}$ = pints of Oxyfluorfen 4SC 43,560

Example: If the desired application rate per treated acre is 1 pint of Oxyfluorfen 4SC, then

$$S = \frac{22,112 \times 1.0}{43,560} \quad S = 0.507 \text{ pints of Oxyfluorfen 4SC should be injected into system.}$$

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 should 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, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

CULTURAL CONSIDERATIONS

In order for Oxyfluorfen 4SC to provide maximum preemergence activity: Prior to application, the bed or soil surface should be smooth and free of crop and weed trash (decaying leaves, clippings, dead weeds, etc.). Leaves and trash may be removed by blowing the area to be treated or by thoroughly mixing the trash into the soil through cultivation prior to herbicide application.

After application, at least one-quarter inch (1/4 inch) of irrigation or rainfall should occur within 3 or 4 weeks after application. The best results from Oxyfluorfen 4SC are from applications to established beds or soil surfaces that are left undisturbed during the time period for which weed control is desired. Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of Oxyfluorfen 4SC. Cutting water furrows or cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment.

RATE RANGES

Select proper application rates based on soil conditions, weed spectrum and desired period of residual weed control.

Preemergence Application: Where rate ranges are given, use the lower rate in the rate range on coarse texture soils with less than 1% organic matter.

Use higher rates in the rate range on medium to fine texture soils, soils containing greater than 1% organic matter, or where a longer period of residual weed control is desired.

Postemergence Application: Where a rate range is given, use higher rate in rate range for heavy weed infestations, weeds in advanced stages of growth or where a longer period of residual weed control is desired.

MIXING DIRECTIONS

Fill the spray tank at least one-third full of clean water. With the pump and agitator running, add the recommended amount of herbicides to the spray tank. The order of addition to the spray tank should be wettable powders first, flowables second and liquids last. Complete filling of the spray tank with water. For all applications of Oxyfluorfen 4SC (except onions) where postemergence weed control is desired, add 2 to 4 pints of 80% active non ionic surfactant cleared for application to growing crops per each 100 gallons of spray. The addition of 4 pints of nonionic surfactant per 100 gallons of spray is recommended to enhance postemergence activity when hard water (greater than 600 ppm) is used as carrier. Maintain agitation until spraying is completed.

Spray equipment should be calibrated carefully before each use. Dosages listed on this label are for broadcast application. For banded application, the amount of Oxyfluorfen 4SC used per acre should be reduced according to the following formula:

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

Tank Mixing Precautions:

Read and carefully follow all 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 recommended application rates. Do not tank mix with another pesticide product 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.

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Tank Mix Compatibility Testing: A jar test is recommended 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 should not be used.

CROP-SPECIFIC USE INFORMATION

ARTICHOKES (GLOBE)

POST-DIRECTED SPRAY

GENERAL INFORMATION

Oxyfluorfen 4SC is an effective herbicide for postemergence and preemergence control of listed broadleaf weeds in artichokes. Oxyfluorfen 4SC should be directed towards the winter ditch, levees or flat rows between the artichoke rows. Artichoke fronds receiving accidental spray or drift will be injured. Over-the-top applications may exhibit severe injury to the foliage and flower bud and are not recommended.

DOSAGE

Oxyfluorfen 4SC is recommended as a post-directed application at 2 to 4 pints (1.0 to 2.0 lb active) per acre. Optimum control is achieved when two applications of Oxyfluorfen 4SC are applied at 2 pints (1.0 lb active) per acre. The initial application should be made to susceptible weed seedlings (up to 8-leaf stage). It is recommended that a second application be made 8 to 10 weeks later. Good results may be achieved when a single application of 4 pints (2.0 lb active) of Oxyfluorfen 4SC is applied to susceptible weed seedlings (up to 8-leaf stage). Do not apply more than 4 pints (2.0 lb active) of Oxyfluorfen 4SC per treated acre per season as a result of a single application or multiple applications. Do not apply within 5 days of harvest.

WEEDS CONTROLLED POSTEMERGENCE

CHEESEWEED (MALVA)	OXALIS (BERMUDA BUTTERCUP)
GROUNDSEL, COMMON	SHEPHERDSPURSE
MUSTARD, COMMON YELLOW	SOWTHISTLE, ANNUAL
NETTLE, BURNING	

WEEDS CONTROLLED PREEMERGENCE

CHEESEWEED (MALVA)	*OXALIS (BERMUDA BUTTERCUP)
GROUNDSEL, COMMON	SHEPHERDSPURSE
LAMBSQUARTERS, COMMON	SOWTHISTLE, ANNUAL
MUSTARD, COMMON YELLOW	

* Suppression

TIMING AND METHOD OF APPLICATION

Treatments should be made after completion of the ditching operation.

Oxyfluorfen 4SC should be applied in a minimum of 40 gallons of water per acre depending upon density of emerged weeds. Spray volume should be increased as weed height and density increase. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment should be calibrated carefully before each use. Spray should be directed towards the winter ditch, levees or flat rows between the artichoke rows. ARTICHOKE FRONDS RECEIVING ACCIDENTAL SPRAY OR DRIFT WILL BE INJURED.

ARTICHOKES (GLOBE)

SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Do not apply more than 4 pints (2.0 lb active) of Oxyfluorfen 4SC per treated acre per season as a result of a single application or multiple applications.

Do not apply Oxyfluorfen 4SC within 5 days of harvest.

Avoid direct spray or drift contact of Oxyfluorfen 4SC with artichoke flowers or buds as severe injury may result.

Do not apply Oxyfluorfen 4SC to artichoke plantings within 60 days after cutting back or transplanting.

BROCCOLI/CABBAGE/CAULIFLOWER

PRE-TRANSPLANT (PREPLANT) APPLICATION FOR PREEMERGENCE BROADLEAF WEED CONTROL

GENERAL INFORMATION

Oxyfluorfen 4SC may be applied for preemergence control of listed annual broadleaf weeds. Applications must be made after completion of soil preparation but prior to transplanting of broccoli, cabbage or cauliflower plants. Transplanting should be completed with minimal soil disturbance. Treated soil surfaces should be left undisturbed after transplanting to obtain greatest benefit of Oxyfluorfen 4SC on susceptible annual broadleaf weeds during the time period for which weed control is desired. However, timely cultivations after weed emergence will assist in weed control. Pre-transplant applications of Oxyfluorfen 4SC in broccoli, cabbage and cauliflower may result in a temporary initial crop response (leaf cupping or crinkling). Crop response may be enhanced if crop leaves come in direct contact with treated soil. Crops rapidly outgrow this condition and develop normally. Severe crop response may result from the use of transplants that are under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides or storage conditions. The use of young (less than 5 weeks old), 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 container will lessen the possibility and/or severity of crop injury.

DOSAGE

Oxyfluorfen 4SC is recommended for use at 0.5 to 1 pint (0.25 to 0.5 lb active) per broadcast acre. Use the lower rate in the rate range for preemergence weed control on coarse texture soils with less than 1 % organic matter. Use the highest rate in the rate range for preemergence weed control on medium to fine texture soils or soils containing greater than 1 % organic matter.

Oxyfluorfen 4SC will assist in early season annual grass control. However, Oxyfluorfen 4SC must not be a basic portion of the grass herbicide program. A planned herbicide program for preemergence or postemergence grass control is recommended. Research has shown that severe crop injury can occur if Oxyfluorfen 4SC is applied to a field that has had an acetanilide herbicide (Dual Magnum® Herbicide, Lasso® Herbicide, or Ramrod® Herbicide) application during the current growing season, therefore, it is not recommended.

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WEEDS CONTROLLED *CARPETWEED
PIGWEEED, REDROOTPURSLANE, COMMON
SMARTWEED, PENNSYLVANIA

Band Width (in inches)	Rate	
Row Width (in inches)	X Broadcast	Acre

Amount Needed per
Acre for Banded
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*Applications of Oxyfluorfen 4SC to muck soils may result in partial control or suppression of the weeds listed.

Oxyfluorfen 4SC at the rate of 0.5 to 1 pint per acre may provide partial control or suppression of galinsoga, common lambsquarters and wild mustard.

METHOD OF APPLICATION

Oxyfluorfen 4SC should be thoroughly mixed with clean water at recommended concentrations, and applied in a minimum of 20 gallons of water per acre. Use conventional ground spray equipment with flat fan nozzles at 20 to 40 psi. Do not exceed 40 psi. Accurately calibrate spray equipment prior to each use. Thoroughly flush the spray equipment (tank, hose, pump, and boom) with water before and after each use. Residual Oxyfluorfen 4SC remaining in spray equipment may damage other crops.

AVOID DRIFT TO ALL OTHER CROPS AND NON-TARGET AREAS. DO NOT APPLY WHEN WEATHER CONDITIONS FAVOR DRIFT. Oxyfluorfen 4SC IS PHYTOTOXIC TO PLANT FOLIAGE.

**BROCCOLI/CABBAGE/CAULIFLOWER
SPECIFIC USE RESTRICTIONS**

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

- Do not apply more than 1 pint (0.5lb active) of Oxyfluorfen 4SC per treated acre per season.
- Do not apply Oxyfluorfen 4SC preemergence to direct-seeded broccoli, cabbage or cauliflower.
- Do not apply Oxyfluorfen 4SC post-transplant or postemergence (over the top) to broccoli, cabbage or cauliflower.
- For field use only. Do not apply Oxyfluorfen 4SC in an enclosed greenhouse structure as injury to plant foliage may result.

CACAO**GENERAL INFORMATION**

Oxyfluorfen 4SC is effective as a preemergence herbicide when used alone for the control of listed annual broadleaf weeds in bearing and nonbearing cacao plantings. Preemergence control is most effective when spray is applied to clean, weed-free soil surfaces. Treated berms or soil surfaces should not be disked or disturbed in any manner as the herbicidal effectiveness of Oxyfluorfen 4SC may be decreased. Seedling weeds are controlled as they come in contact with soil-applied herbicide during emergence.

**Oxyfluorfen 4SC USED ALONE
DOSAGE**

Oxyfluorfen 4SC is recommended for preemergence and postemergence control of susceptible weeds at 1 to 4 pints (0.5 to 2.0 lb active) per broadcast acre when directed to the orchard floor beneath cacao plants, or at a dosage of up to 2 pints per acre as a pre-transplant application. For directed spray applications, cacao transplants must be healthy and of suitable size for field transplanting. Avoid spray contact with cacao foliage as injury may result. Dosages listed are for broadcast application. For banded application, the amount of Oxyfluorfen 4SC used per acre should be reduced according to the following formula:

WEEDS CONTROLLED POSTEMERGENCE

Apply 1 to 4 pints (0.5 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre. Applications to weeds beyond the four-leaf stage may result in partial control.

PURSLANE, COMMON SPURGE, GARDEN

WEEDS CONTROLLED PREEMERGENCE

Apply 1 to 4 pints (0.5 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre.

AGERATUM BUTTONWEED
CROTOLARIA PURSLANE, COMMON
SPURGE, GARDEN**TIMING AND METHOD OF APPLICATION**

DO NOT APPLY PREPLANT OR PREEMERGENCE TO DIRECTSEEDED CACAO. Oxyfluorfen 4SC MAY BE APPLIED TO ESTABLISHED CACAO OR APPLIED PRE-TRANSPLANT OR TO RECENTLY TRANSPLANTED CACAO. Treatments should only be applied to healthy cacao stock (as determined by standard commercial growing practices). Care must be taken to prevent direct spray contact with foliage. Cacao foliage receiving accidental spray or drift may be injured. As a preemergence or postemergence treatment to weeds, apply in a minimum of 15 gallons of water per acre. Use higher volumes to assure adequate coverage in high densities of emerged weeds or heavy trash. Oxyfluorfen 4SC should be directed to the soil and the base of the tree. Use of a low pressure sprayer equipped with a breakaway boom and a flat fan or off-center (OC) nozzles is recommended. Spray shields are suggested for use in young trees. Spray equipment should be calibrated carefully before each use.

CACAO SPECIFIC USE RESTRICTIONS

In addition to the following, also observe the GENERAL USE RESTRICTIONS listed at the beginning of this label.

- Do not apply more than 4 pints (2.0 lb active) per broadcast acre of Oxyfluorfen 4SC in a single application or 12 pints (6.0 lb active) per broadcast acre per year.
- Do not apply Oxyfluorfen 4SC within one (1) day of harvest.
- Direct spray toward the base of the trees. Avoid spray contact with foliage.
- Do not apply preplant or preemergence to direct-seeded cacao.

CITRUS (NONBEARING)CALAMONDIN, CHIRONJA, CITRUS CITRON, GRAPEFRUIT,
KUMQUAT, LEMON, LIME, MANDARIN, PUMMELO, SATSUMA
MANDARIN, SOUR ORANGE, SWEET ORANGE, TANGELO,
TANGERINE, TANGORFOR USE ONLY IN PERMANENTLY ESTABLISHED GROVES IN
ARIZONA, CALIFORNIA, FLORIDA, LOUISIANA AND TEXAS**GENERAL INFORMATION**

Oxyfluorfen 4SC is effective as a preemergence and/or postemergence herbicide when used alone or in recommended tank mix combinations for the control of listed annual broad leaf weeds in nonbearing citrus plantings. Oxyfluorfen 4SC may be applied to newly planted trees or to young trees that will not bear fruit within one year.

The most effective postemergence weed control is achieved when Oxyfluorfen 4SC is applied to seedling weeds at the recommended growth stage. For broader spectrum postemergence control of grass and broadleaf weeds, a tank mix of Oxyfluorfen 4SC with paraquat ("Herbicide) or glyphosate ("Herbicide) can be used.

For residual grass control in citrus, a tank mixture of Oxyfluorfen 4SC with Devrinol® Herbicide, simazine, Solicam® Herbicide or Surflan Herbicide can be used. Contact herbicides such as paraquat or glyphosate may also be added to the tank mixture. Check individual product labels to determine suitability and use rates for various crops.

Oxyfluorfen 4SC USED ALONE

**GEOGRAPHIC USE DIRECTIONS
ARIZONA AND CALIFORNIA**

DOSAGE

Oxyfluorfen 4SC is recommended for postemergence control at 1 to 4 pints (0.5 to 2.0 lb active) per broadcast acre. For preemergence control of susceptible weeds, use 4 pints (2.0 lb active) per broadcast acre.

WEEDS CONTROLLED POSTEMERGENCE (weeds up to 4 inches high) - Apply 1 to 4 pints (0.5 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre. Applications to weeds beyond this 4-inch stage may result in partial control.

- | | |
|----------------------|--------------------|
| CHEESEWEED (MALVA) | MINERSLETTUCE |
| FIDDLENECK, COAST | NETTLE, BURNING |
| * FILAREE, BROADLEAF | PIGWEEED, REDROOT |
| *FILAREE, REDSTEM | REDMAIDS |
| *FILAREE, WHITESTEM | SHEPHERDSPURSE |
| GROUNDSEL, COMMON | SOWTHISTLE, ANNUAL |
| HENBIT | |

* Oxyfluorfen 4SC at the 4-pint rate (2.0 lb active) will provide control of filaree not exceeding the 4-inch stage. Applications to filaree beyond the 4-inch stage may result in partial control.

WEEDS CONTROLLED PREEMERGENCE - Apply 2.5 to 4 pints (1.25 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre.

- | | |
|-----------------------|--------------------|
| BURCLOVER | LETTUCE, PRICKLY |
| CHEESEWEED (MALVA) | PIGWEEED, REDROOT |
| FIDDLENECK, COAST | PURSLANE, COMMON |
| FILAREE, BROADLEAF | REDMAIDS |
| FILAREE, REDSTEM | ROCKET, LONDON |
| WHITESTEM | SHEPHERDSPURSE |
| GROUNDSEL, COMMON | SOWTHISTLE, ANNUAL |
| KNOTWEED, PROSTRATE | SPURGE, PROSTRATE |
| LAMBSQUARTERS, COMMON | SPURGE, SPOTTED |

FLORIDA, LOUISIANA AND TEXAS

DOSAGE

Oxyfluorfen 4SC is recommended for postemergence control at 1 to 4 pints (0.5 to 2.0 lb active) per broadcast acre. For preemergence control of susceptible weeds, Oxyfluorfen 4SC is recommended at 4 pints (2.0 lb active) per broadcast acre.

WEEDS CONTROLLED POSTEMERGENCE - Apply 1 to 4 pints (0.5 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre. The lower rate is recommended for the control of susceptible seedling weeds in the early postemergence stage, up to the 4-leaf stage. The higher rate (2.0 lb active) should be used for weeds up to the 6-leaf stage. Applications to weeds beyond the 6-leaf stage may result in partial control.

- | | |
|-----------------------------|-------------------------|
| BALSAMAPPLE | PEPPERWEED, VIRGINIA |
| *CUDWEED, NARROWLEAF | PIGWEEED, REDROOT |
| ** EVENINGPRIMROSE, CUTLEAF | POINSETTIA, WILD |
| GROUNDCHERRY, CUTLEAF | PURSLANE, COMMON |
| GROUNDCHERRY, WRIGHT | PUSLEY, FLORIDA |
| LAMBSQUARTERS, COMMON | SIDA, PRICKLY (TEAWEED) |
| MORNINGGLORY, ANNUAL | SMARTWEED, PENNSYLVANIA |
| NIGHTSHADE, AMERICAN | SOWTHISTLE, ANNUAL |
| BLACK | |
| NIGHTSHADE, BLACK | |

* Maximum 0.5-inch diameter.
 ** Highest rate and/or multiple applications may be required for acceptable control. Do not apply more than 8 pints (4.0 lb active) per broadcast acre during any 12-month period as a result of multiple applications.

WEEDS CONTROLLED PREEMERGENCE - Apply 4 pints (2.0 lb active) of Oxyfluorfen 4SC per broadcast acre.

- | | |
|-----------------------------|-------------------------|
| CUDWEED, NARROWLEAF | POINSETTIA, WILD |
| ** EVENINGPRIMROSE, CUTLEAF | PUSLEY, FLORIDA |
| GROUNDCHERRY, CUTLEAF | SIDA, PRICKLY (TEAWEED) |
| LAMBSQUARTERS, COMMON | SMARTWEED, PENNSYLVANIA |
| NIGHTSHADE, AMERICAN | SOWTHISTLE, ANNUAL |
| BLACK | SPURGE, PROSTRATE |
| NIGHTSHADE, BLACK | SPURGE, SPOTTED |
| PEPPERWEED, VIRGINIA | |
| PIGWEEED, REDROOT | |

** Highest rate and/or multiple applications may be required for acceptable control. Do not apply more than 8 pints (4.0 lb active) per broadcast acre during any 12-month period as a result of multiple applications.

ALL STATES - ARIZONA, CALIFORNIA, FLORIDA, LOUISIANA AND TEXAS

TIMING AND METHOD OF APPLICATION

Oxyfluorfen 4SC should be directed to the soil and the base of trees. Avoid direct spray contact on the citrus foliage. Use a low-pressure sprayer equipped with a breakaway boom and flat fan nozzles. An off-center (OC) nozzle positioned at the end of the boom may be desired.

Weed Stage	SPRAY VOLUME (Gallons of Water per Acre)
Preemergence	40 or more
Postemergence up to 4-inch or 4-leaf stage	40 or more
Exceeding 4-inch or 4-leaf stage	100 or more

TANK MIXES WITH Oxyfluorfen 4SC

IMPORTANT: Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mix, the most restrictive situations must apply.

DOSAGE

For preemergence control of susceptible grass and broadleaf weeds in citrus plantings, a tank mixture of Oxyfluorfen 4SC with Devrinol, Purslane, Sulfam, or Surflan can be applied. Apply at the recommended rates and growth stages to susceptible weed species in a manner described on the respective labels. For postemergence control of susceptible grass and broadleaf weeds, a tank mixture of paraquat or glyphosate with Oxyfluorfen 4SC or combinations of Oxyfluorfen 4SC plus Devrinol, simazine, Sulfam or Surflan can be used. Apply at the recommended rates and growth stages to susceptible weed species in a manner described on the respective labels.

WEEDS CONTROLLED

In addition to the weeds controlled by Oxyfluorfen 4SC used alone, control of susceptible weeds listed on the respective labels for the following products is also obtained:

Devrinol	simazine*
paraquat glyphosate	Sulfam
	Surflan

*In addition, provides preemergence control of horseweed (marehail).

CITRUS (NONBEARING)

SPECIFIC USE RESTRICTIONS

In addition to the following, also observe the GENERAL USE RESTRICTIONS listed at the beginning of this label.

Apply Oxyfluorfen 4SC only to nonbearing citrus.

Do not apply more than 4 pints of Oxyfluorfen 4SC (2.0 lb active) per broadcast acre in a single application or more than 8 pints (4.0 lb active) per broadcast acre during any 12-month period as a result of multiple applications.

Oxyfluorfen 4SC or any of the combinations recommended on this label should only be applied to healthy growing trees.

Do not apply during periods of new foliage growth. Applications should be made after foliage has fully expanded and hardened off. Direct spray toward the base of trees. Avoid direct sprays contact on the citrus foliage.

CLARY SAGE

FOR USE ONLY IN NORTH CAROLINA

GENERAL INFORMATION

For control of henbit (*Lamium amplexicaule*) and other annual broadleaf weeds (see Weeds Listed table in the General Use Information section) in clary sage (*Salvia sclarea*) grown and utilized in the essence industry. Applications to control henbit during the winter season should be timed to start shortly after the first flush of henbit is in the 2- to 4-leaf stage of growth. Additional applications may be required to control subsequent weed flushes through the spring season. Clary sage may respond to the topical application of this product with some marginal leaf burn,

but recovery is rapid. After treatment, henbit will stop growing and slowly die.

DOSAGE

Oxyfluorfen 4SC should be applied at the rate of 0.25 to 0.5 pint per acre (0.12 to 0.25 lb active) in 20 to 50 gallons of water per acre. Apply at 20 to 40 psi.

COFFEE

BEARING AND NONBEARING COFFEE IN HAWAII

GENERAL INFORMATION

Oxyfluorfen 4SC is effective as a preemergence herbicide when used alone for the control of listed annual broadleaf weeds in bearing and nonbearing coffee plantings. For broader spectrum postemergence control of grass and broadleaf weeds, a tank mixture of either paraquat or glyphosate with Oxyfluorfen 4SC can be applied to seedling weeds. Check individual product labels to determine suitability and use rates for crop.

Oxyfluorfen 4SC USED ALONE

DOSAGE

For preemergence control of susceptible weeds, Oxyfluorfen 4SC is recommended at 1 to 4 pints (0.5 to 2.0 lb active) per broadcast acre as a preemergence application directed to the orchard floor beneath coffee plants, or at a dosage of up to 2 pints per broadcast acre as a pre-transplant application. For directed spray applications, coffee transplants must be healthy and of suitable size for field transplanting. Avoid spray contact with coffee foliage as injury may result. Oxyfluorfen 4SC may be applied postemergence (over the top) to dormant coffee transplants. Applications must only be made prior to bud break to avoid possible phytotoxicity to the coffee foliage. Over-the-top applications made after buds start to swell may result in injury to the coffee plant and are not recommended. Dosages listed on this label are for broadcast application. For banded application, the amount of Oxyfluorfen 4SC used per acre should be reduced according to the following formula:

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

WEEDS CONTROLLED POSTEMERGENCE

Apply 1 to 4 pints (0.5 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre. Applications to weeds beyond the four leaf stage may result in partial control.

PURSLANE, COMMON SPURGE, GARDEN

WEEDS CONTROLLED PREEMERGENCE

Apply 1 to 4 pints (0.5 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre.

AGERATUM PURSLANE, COMMON
BUTTONWEED SPURGE, GARDEN
CROTALARIA

TIMING AND METHOD OF APPLICATION

DO NOT APPLY PRE PLANT OR PREEMERGENCE TO DIRECT SEEDED COFFEE.

Treatments should only be applied to healthy coffee stock (as determined by standard commercial growing practices). Care must be taken to prevent direct spray contact with foliage. Coffee foliage receiving accidental spray or drift may be injured. As a preemergence or postemergence treatment to weeds, apply in a minimum of 30 gallons of water per acre. Use higher volumes to ensure adequate coverage in high densities of emerged weeds or heavy traffic. Oxyfluorfen 4SC should

be directed to the soil and the base of the tree. Use of a low-pressure sprayer equipped with a breakaway boom and flat fan or off-center (OC) nozzles is recommended. Spray equipment should be calibrated carefully before each use.

CONIFER SEEDBEDS

To assist in the establishment of conifer seedbeds, Oxyfluorfen 4SC can be applied as a preemergence application following seeding. Postemergence applications should be delayed until a minimum of 5 weeks after emergence of the conifer seedlings. During periods of cool, cloudy weather, make certain that seedlings have hardened off prior to spraying.

Conifers are tolerant to preemergence and postemergence applications of Oxyfluorfen 4SC. Oxyfluorfen 4SC will provide both postemergence and residual preemergence control of many broadleaf weeds and annual grass species.

CONIFER SPECIES

Oxyfluorfen 4SC may be applied to conifer seedbeds of species:

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>
PINE	
AUSTRIAN	<i>Pinus nigra</i>
EASTERN WHITE	<i>Pinus strobus</i>
HIMALAYAN JACK	<i>Pinus wallichiana</i>
LOBLOLLY	<i>Pinus banksiana</i>
LODGEPOLE	<i>Pinus taeda</i>
LONGLEAF	<i>Pinus contorta</i>
MONTEREY	<i>Pinus palustris</i>
MUGO	<i>Pinus radiata</i>
PONDEROSA	<i>Pinus mugo</i>
SCOTCH	<i>Pinus ponderosa</i>
SHORTLEAF	<i>Pinus sylvestris</i>
SLASH	<i>Pinus echinata</i>
VIRGINIA	<i>Pinus elliotii</i>
	<i>Pinus virginiana</i>

SPRUCE	
BLUE	<i>Picea pungens</i>
DWARF ALBERTA	<i>Picea glauca Conica</i>
NORWAY	<i>Picea abies</i>
SITKA	<i>Picea sitchensis</i>

PREEMERGENCE DOSAGE
Apply 0.5 to 2 pints (0.25 lb to 1.0 lb active) of Oxyfluorfen 4SC per broadcast acre as a preemergence application prior to conifer emergence. Where grass weeds are present, a rate of 1 to 2 pints (0.5 to 1.0 lb active) of Oxyfluorfen 4SC per broadcast acre is recommended. In known areas of high weed competition, 2 pints (1.0 lb active) of Oxyfluorfen 4SC per broadcast acre are recommended.

TIMING AND METHOD OF APPLICATION
Oxyfluorfen 4SC should be thoroughly mixed with clean water at recommended concentration and applied at 20 to 40 psi in a minimum of 20 gallons of water per treated acre. Broadcast to beds and irrigate prior to weed emergence with 1/2 to 3/4 inch of sprinkler irrigation.

POSTEMERGENCE DOSAGE

Apply 0.5 to 1 pints (0.25 lb to 0.5 lb active) of Oxyfluorfen 4SC per broadcast acre with each postemergence application. Depending of subsequent weed flushes, multiple applications may be necessary to achieve season-long weed control.

TIMING AND METHOD OF APPLICATION

Postemergence applications should be delayed until a minimum of 5 weeks after emergence of conifer seedlings. During periods of cool, cloudy weather, make certain that seedlings have hardened off prior to spraying. Application should be made to seedling weeds (less than 4 inches in height). Oxyfluorfen 4SC should be thoroughly mixed with clean water at recommended concentration and applied as a broadcast application at 20 to 40 psi in a minimum of 20 gallons of water per treated acre.

Sprinkler Chemigation: If Oxyfluorfen 4SC is to be applied via sprinkler irrigation (center pivot), follow the method of application directions listed for sprinkler irrigation. Additionally, for application using center pivot irrigation systems, apply the specified dosage of Oxyfluorfen 4SC per acre as described above and meter Oxyfluorfen 4SC at a continuous uniform rate during the entire irrigation period to allow for uniform distribution to the vegetation and soil surface. When applying this product using a sprinkler irrigation system, follow all directions given in the CHEMIGATION section of this label.

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

Many container-grown conifers and conifer transplants are tolerant to preemergence and postemergence applications of Oxyfluorfen 4SC. Applied postemergence, Oxyfluorfen 4SC will provide both postemergence and preemergence control of many broadleaf weeds and grasses listed in the "Weeds Controlled" Section above. Postemergence applications should be applied before bud break or after foliage has had an opportunity to harden off. Conifers may be transplanted from seedbeds and sprayed directly providing bud break has not occurred.

The following conifer species in addition to species listed under the CONIFER SEEDBED section have been shown to be tolerant to Oxyfluorfen 4SC.

ARBORVITAE	<i>Thuja occidentalis</i>	RED CEDAR	<i>Juniperus virginiana</i>
	<i>Thuja orientalis</i>		
JUNIPER	<i>Juniperus chinensis</i>	WESTERN HEMLOCK	<i>Tsuga heterophylla</i>
	<i>Juniperus horizontalis</i>		
	<i>Juniperus procumbens</i>	YEW	<i>Taxus species</i>
	<i>Juniperus sabina</i>		
	<i>Juniperus scopulorum</i>		

DOSAGE

For preemergence or postemergence weed control apply 2 to 4 pints (1.0 lb to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre.

ING AND METHOD OF APPLICATION

optimum weed control, preemergence applications should be made immediately after transplanting seedlings or to weed-free conifer stock. Postemergence applications should be made to weeds less than 4 inches height. Two applications may be necessary, in fall transplanted conifer seedlings, for season-long weed control. The addition of 0.25% (2 pints/100 gallons) of spray solution) of an 80% active nonionic surfactant, cleared for use on ornamental plants, enhances Oxyfluorfen 4SC activity on emerged weeds. Oxyfluorfen 4SC must be applied only to conifer transplants prior to bud break or after foliage has had an opportunity to harden off. Thoroughly mix with clean water at recommended concentration and apply at 20 to 40 psi in a minimum of 20 gallons of water per treated acre. Spray over the top of transplants. Heavy rainfall immediately following application to emerged weeds may reduce effectiveness.

TANK MIXTURES FOR SELECTED FIELD GROWN CONIFERS

In addition to the weeds controlled by Oxyfluorfen 4SC used alone, tank mixes with other preemergence or postemergence herbicides registered for this use, may provide a broader spectrum of weed control. Oxyfluorfen 4SC may be tank mixed with products containing the following active ingredients registered for use in conifer plantings:

- glyphosate
- napropamide
- oryzalin
- pendimethalin
- proflam
- pronamide
- sethoxydim

Determine the additional weed species to be controlled and based on label claims, select the product(s), which would give effective control of the targeted weed(s). When using tank mixes of two or more products, use conditions must be in accordance with the more (most) restrictive of the label limitations and precautions of the mixing partners.

IMPORTANT: Read and follow container labels of tank-mix partners and use as directed by labeling. Follow the most restrictive labeling.

CONIFER - SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Do not apply more than 4 pints (2.0 lb active) of this product per broadcast acre per year.

NOT FOR CONIFER RELEASE IN FOREST MANAGEMENT PROGRAMS OR FOR FOREST REGENERATION APPLICATIONS.

Do not apply Oxyfluorfen 4SC in an enclosed greenhouse structure as injury to plant foliage may result.

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.

Always apply Oxyfluorfen 4SC only to healthy conifer stock. Do not apply Oxyfluorfen 4SC 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 feed livestock forage cut from areas treated with Oxyfluorfen 4SC.

SELECTED FIELD-GROWN DECIDUOUS TREE SPECIES

Many field-grown deciduous trees are sensitive to applications of GoalTender directed to the soil and base of the plant. GoalTender will provide both preemergence and postemergence control of many broadleaf weeds and grasses.

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DECIDUOUS TREE SPECIES	
**Almond	<i>Prunus spp.</i>
**Apple	<i>Malus X domestica</i>
**Apricot	<i>Prunus spp.</i>
Ash, Green	<i>Fraxinus pennsylvanica</i>
Ash, White	<i>Fraxinus americana</i>
Birch, River	<i>Betula nigra</i>
**Cherry	<i>Prunus spp.</i>
**Chestnut	<i>Castanea spp.</i>
**Crabapple	<i>Malus spp.</i>
Docwood	<i>Cornus florida</i>
Eucalyptus	<i>Eucalyptus viminalis</i> <i>Eucalyptus pulverulenta</i> <i>Eucalyptus camaldulensis</i>
**Filbert	<i>Corylus spp.</i>
Lilac	<i>Syringa vulgaris</i>
Locust, Black	<i>Robinia pseudoacacia</i>
*Maple, Black	<i>Acer negundo</i>
*Maple, Red	<i>Acer rubrum</i>
*Maple, Sugar	<i>Acer saccharum</i>
Myrtle, Crepe	<i>Laurstroemia indica</i>
**Nectarine	<i>Prunus spp.</i>
**Nut, Hickory	<i>Carya sp.</i>
**Nut, Macadamia	<i>Macadamia ternifolia</i>
Oak, Chestnut	<i>Quercus prinus</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 spp.</i>
Poplar, Tulip	<i>Liriodendron tulipifera</i>
**Peach	<i>Prunus persica</i>
**Pear	<i>Pyrus spp.</i>
**Pecan	<i>Carya spp.</i>
**Pistachio	<i>Pistacia vera</i>
**Plum	<i>Prunus spp.</i>
**Prune	<i>Prunus spp.</i>
Redbud	<i>Cereis canadensis</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Platanus occidentalis</i>
**Walnut, Black	<i>Juglans nigra</i>

*Do not apply to maple trees used for production of maple sap or maple syrup.

**Apply as directed to nonbearing trees. For bearing treefruit, nut and vine crops, refer to Treefruit/Nut/Vine section of this label for use directions.

4. DOSAGE

Apply 1 to 4 pints (0.5 lb to 2.0 lb active) of Oxyfluorfen per acre as a spray onto the soil area surrounding deciduous plants. Preemergence or early postemergence weed control. This product may be applied as a single or split application. DO NOT apply more than 4 pints of product per season.

For spot treatments, refer to the following table for dosage recommendations. Sprays must be uniform and applied to the soil on a spray-to-wet basis. When spraying to control weeds on a preemergence or postemergence basis, 1 gallon of spray mixture should cover 400 square feet. (This is equivalent to applying Oxyfluorfen 4SC at a use rate of approximately one gallon per acre in a spray volume of 110 gallons per acre). It is recommended that an 80% active nonionic surfactant be added to the spray mixture at a rate of 1 tablespoon (0.5 fluid ounces) per gallon of spray when making postemergence applications.

Pounds Active / Acre	Pints Oxyfluorfen 4SC per Acre	Fluid Ounces (milliliters) of Oxyfluorfen 4SC in one gallon of spray mix to treat 400 sq. ft.	Fluid Ounces (milliliters) of Oxyfluorfen 4SC in one quart of spray mix to treat 100 sq. ft.
2	4	0.6 (18)	0.15 (4.5)

TIMING

Oxyfluorfen 4SC may be applied after transplanting or to established deciduous trees. For optimum weed control, applications should be made prior to weed germination.

For maximum safety to deciduous species mentioned on this label, post-directed applications of Oxyfluorfen 4SC should be made to the soil prior to bud swell in the spring or after trees have initiated dormancy in the fall. Care must be taken to avoid contact of spray drift or mist with foliage or green bark of deciduous trees.

Oxyfluorfen 4SC may be phytotoxic to the foliage of non-target plants. Avoid making applications of this product under conditions that favor drift to non-target areas.

Note: Applications made after bud swell may result in injury to deciduous trees and are not recommended. If a non-dormant application is required due to weed competition, do not apply during periods of new foliage growth. Applications should be made after foliage has fully expanded and hardened off. Direct spray toward the soil at the base of the trees and use greater than 50 gallons of water per acre. Splashing soil can carry Oxyfluorfen 4SC, which may injure the leaves of some deciduous trees.

METHOD OF APPLICATION

Oxyfluorfen 4SC should be directed to the soil. Avoid direct spray or drift onto foliage, flowers or green bark. Apply in 20 or more gallons of water per acre to provide uniform spray distribution and coverage to the soil surface. Use higher volumes to ensure adequate soil coverage in high densities of emerged weeds or heavy trash. Thorough spray coverage is essential to maximize the postemergence activity of Oxyfluorfen 4SC. Use a low-pressure (20 to 40 psi) sprayer. The use of spray shields that reduce exposure of foliage and bark to Oxyfluorfen 4SC spray is suggested. Spray equipment should be calibrated carefully before each use.

TANK MIXTURES FOR SELECTED FIELD GROWN

DECIDUOUS TREES

In addition to the weeds controlled by Oxyfluorfen 4SC used alone, tank mixes with other preemergence or postemergence herbicides registered for this use, may provide a broader spectrum of weed control. Oxyfluorfen 4SC may be tank mixed with products containing the following active ingredients registered for use in conifer plantings:

- glyphosate
- napropamide
- oryzalin
- pendimethalin
- proflaminate
- pronamide
- sethoxydim

Determine the additional weed species to be controlled and based on label claims, select the product(s) which would give effective control of the targeted weed(s). When using tank mixes of two or more products, use conditions must be in accordance with the more (most) restrictive of the label limitations and precautions of the mixing partners.

IMPORTANT: Read and follow container labels of tank-mix partners and use as directed by labeling. Follow the most restrictive labeling.

FIELD-GROWN DECIDUOUS TREES SPECIFIC USE RESTRICTIONS

DO NOT apply more than 4 pints (2.0 lb active) of this product per broadcast acre per year.

The use directions described here for field-grown deciduous trees do not apply for bearing treefruit, nut and vine crops. For selected bearing treefruit, nut and vine crops, refer to Treefruit/Nut/Vine section of this label use directions.

Apply this product to the soil surface surrounding trees prior to bud swell or after trees have initiated dormancy in the fall. Although not recommended, if a non-dormant application is required, apply as a directed spray when foliage has fully expanded and hardened off. Do not apply during periods of new foliage growth.

Avoid direct or indirect spray contact to foliage flowers and green bark.

DO NOT apply this product when weather conditions favor drift. Avoid drift to non-target areas. Oxyfluorfen 4SC is phytotoxic to plant foliage.

DO NOT apply Oxyfluorfen 4SC 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 graze or feed livestock forage cut from areas treated with Oxyfluorfen 4SC.

COTTON

POST-DIRECTED SPRAY

GENERAL INFORMATION

Oxyfluorfen 4SC may be applied as a post-directed application for broadleaf weed control in cotton. Cotton leaves that are accidentally sprayed will exhibit necrotic spotting and may drop from the plant; therefore, care must be exercised to avoid spray contact with the cotton leaves. Crop response may be enhanced if applications are made when excessive soil moisture is present or if rainfall occurs following application. Cotton will outgrow this condition and continue to develop normally.

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DOSAGE

Oxyfluorfen 4SC is recommended as a post-directed application at 0.5 to 1 pint (0.25 to 0.51b active) per acre. Optimum control is achieved when 1 pints of Oxyfluorfen 4SC (0.5lb active) per acre are applied to weed seedlings not exceeding 4 true leaves. Effective control of succulent weed seedlings in the 2 to 3 leaf stage can usually be obtained when 0.5 pint of Oxyfluorfen 4SC (0.25lb active) per acre are applied. See MIXING DIRECTIONS for surfactant recommendation. Weeds should be in the seedling stage, young and actively growing. Do not count cotyledon leaves.

Dosages listed are for broadcast application. For banded application, the amount of Oxyfluorfen 4SC used per acre should be reduced according to the following formula:

Band Width (in inches)	Rate per	Amount Needed per Acre for Banded Application
Row Width (in inches)	X Broadcast Acre	

WEEDS CONTROLLED POSTEMERGENCE

When Oxyfluorfen 4SC is applied as a post-directed application at the recommended weed stage and dosage in cotton, the following weeds are controlled:

- | | |
|----------------------------|--------------------------|
| COCKLEBUR, COMMON | NIGHTSHADE, HAIRY |
| CROTON, TROPIC | PIGWEEED, REDROOT |
| GROUNDCHERRY, CUTLEAF | *POINSETTIA, WILD |
| GROUNDCHERRY, WRIGHT | PURSLANE, COMMON |
| JIMSONWEED | SESBANIA, HEMP |
| LAMBSQUARTERS, COMMON | --SICKLE POD |
| MORNINGGLORY, ANNUAL | *SIDA, PRICKLY (TEAWEED) |
| (UP TO 6 LEAF) | SMARTWEED, |
| NIGHTSHADE, AMERICAN BLACK | PENNSYLVANIA VELVETLEAF |
| NIGHTSHADE, BLACK | |

*Multiple applications may be required for acceptable control.
--Post-direct applications of Oxyfluorfen 4SC will kill or suppress seedlings not exceeding the one true leaf stage.

TIMING

SOUTHERN COTTON

ALABAMA, ARKANSAS, GEORGIA, LOUISIANA, MISSISSIPPI, MISSOURI, NEW MEXICO, NORTH CAROLINA, OKLAHOMA, SOUTH CAROLINA, TENNESSEE, TEXAS and VIRGINIA

Cotton plant height must be a minimum 6 inches or greater. Application to cotton plants less than 6 inches tall may result in severe crop injury and is not recommended. In cotton 6 to 8 inches tall, Oxyfluorfen 4SC must be applied using rigid precision ground sprayer equipment. The use of spray shields is recommended to avoid spray contact with cotton foliage. Use branch lifters or shields if excessive spray contact on larger cotton plants (8 inches or greater) cannot be avoided by the directed spray.

WESTERN COTTON

ARIZONA AND CALIFORNIA

Cotton plant height must be a minimum 6 inches or greater. Application to cotton plants less than 6 inches tall may result in severe crop injury and is not recommended. In cotton 6 to 8 inches tall, Oxyfluorfen 4SC must be applied using rigid precision ground sprayer equipment. The use of spray shields is recommended to avoid spray contact with cotton foliage. Use branch lifters or shields if excessive spray contact on larger cotton plants (8 inches or greater) cannot be avoided by the directed spray.

To obtain the maximum benefit of postemergence activity, encourage weed emergence by irrigating prior to spraying. Irrigate immediately following herbicide application to obtain the greatest benefit of preemergence activity from Oxyfluorfen 4SC on nightshade and groundcherry species.

METHOD OF APPLICATION

SOUTHERN AND WESTERN COTTON

Accurate, uniform placement of Oxyfluorfen 4SC spray is essential for effective weed control and to minimize cotton injury. As a directed postemergence application, Oxyfluorfen 4SC should be applied at 20 to 25 psi using 20 to 40 gallons of spray on a broadcast acre basis. Do not exceed 25 psi. Spray should be directed towards the base of the cotton plant. Cotton foliage receiving accidental spray or drift may be injured. Weeds should be in the seedling stage, young and actively growing.

Oxyfluorfen 4SC can be applied using a post-direct spray rig with only 2 flat fan nozzles per row, 1 nozzle on each side of the row. Additional care should be taken when adjusting sprayer prior to application. For best coverage, it is suggested to use 4 flat fan nozzles per row, 2 nozzles on each side of the row. The 2 forward nozzles should point forward and downward while the rear nozzles should point to the rear and downward. With either sprayer system, nozzles should be adjusted to cover the weed foliage with minimum contact to the cotton plant. Do not use cone nozzles.

TANK MIXES WITH Oxyfluorfen 4SC

IMPORTANT: Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for tank mixtures, the most restrictive situations must apply.

DOSAGE

For postemergence control of susceptible grass and broadleaf weeds in cotton, a tank mixture of Oxyfluorfen 4SC with either Karmex® Herbicide (diuron) or MSMA can be applied as a post-directed application. Apply at the recommended rates and growth stages to susceptible weed species in a manner described on the respective labels.

COTTON - SOUTHERN AND WESTERN

SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

- **SOUTHERN COTTON:** Do not apply more than 1 pint (0.5lb active) per broadcast acre of Oxyfluorfen 4SC per season as a result of a single application or multiple applications. Do not apply within 90 days of harvest.
- **WESTERN COTTON:** Do not apply more than 1 pint (0.5 lb active) of Oxyfluorfen 4SC per broadcast acre in a single application, or more than a total of 2 pints (1.0 lb active) of Oxyfluorfen 4SC per broadcast acre per season as a result of multiple applications. Do not apply within 75 days of harvest.

COTTONWOOD

GENERAL INFORMATION

Oxyfluorfen 4SC is an effective herbicide for postemergence and preemergence control of listed broadleaf weeds in cottonwood plantings. Oxyfluorfen 4SC may be applied postemergence or be post-directed to the base of the cottonwood tree. Applications must only be made prior to bud break to avoid possible phytotoxicity to the cottonwood foliage. Applications made after bud break may result in injury to the cottonwood plant and are not recommended.

DOSAGE

Apply 2 to 4 pints (1.0 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre for preemergence and postemergence weed control. The addition of 1 quart of an 80% active non ionic surfactant per 100 gallons of spray mix will assist in spray coverage and wetting of weeds for postemergence control.

WEEDS CONTROLLED

When Oxyfluorfen 4SC is applied preemergence or postemergence to weed seedlings (not exceeding 6-leaf stage) at recommended dosages, the following broadleaf weeds are controlled:

GROUNDSEL, COMMON	MUSTARD, HEDGE
KNOTWEED, PROSTRATE	SHEPHERDSPURSE
LAMBSQUARTERS, COMMON	SMARTWEED, PENNSYLVANIA

TIMING AND METHOD OF APPLICATION

For optimum weed control, Oxyfluorfen 4SC should be applied prior to weed emergence. Preemergence applications should be made prior to or immediately after transplanting dormant cottonwood seedlings. Applications must be made prior to bud break of the cottonwood trees,

Oxyfluorfen 4SC should be applied in a minimum of 20 gallons of water per acre depending upon density of emerged weeds. Spray volume should be increased as weed height and density increase. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment should be calibrated carefully before each use.

COTTONWOOD SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Oxyfluorfen 4SC should only be applied to dormant healthy cottonwood stock.

Do not apply more than 4 pints (2.0 lb active) per treated acre per growing season as a result of single or multiple applications.

EUCALYPTUS

GENERAL INFORMATION

Oxyfluorfen 4SC is an effective herbicide for postemergence and preemergence control of listed broadleaf weeds in permanently established eucalyptus (*E. viminalis*, *E. pulverulenta*, and *E. camaldulensis*) plantings. In new plantings, Oxyfluorfen 4SC should be applied immediately prior to or immediately following transplanting of dormant eucalyptus seedlings. In established plantings, Oxyfluorfen 4SC may be applied postemergence (over the top) or be post-directed to the base of the eucalyptus tree. Applications must only be made prior to bud break to avoid possible phytotoxicity to the eucalyptus foliage. Applications made after bud break may result in injury to the eucalyptus plant and are not recommended.

DOSAGE

Apply 2 to 4 pints (1.0 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre for preemergence and postemergence weed control. The addition of 1 quart of an 80% active nonionic surfactant per 100 gallons of spray mix will assist in spray coverage and wetting of weeds for postemergence control.

WEEDS CONTROLLED

When Oxyfluorfen 4SC is applied preemergence or postemergence to weed seedlings (not exceeding 6-leaf stage) at recommended dosages, the following broadleaf weeds are controlled:

WEEDS CONTROLLED POSTEMERGENCE

CHEESEWEED (MALVA)	MINERSLETTUCE
FIDDLE NECK, COAST	NETTLE, BURNING
*FILAREE, BROADLEAF	PIGWEEED, RED ROOT
*FILAREE, REDSTEM	REDMAIDS
*FILAREE, WHITESTEM	SHEPHERDSPURSE
GROUNDSEL, COMMON	SOWTHISTLE, ANNUAL
HENBIT	

*Oxyfluorfen 4SC at the 4-pint rate (2.0 lb active) will provide control of filaree up to the 6-leaf stage.

WEEDS CONTROLLED PREEMERGENCE

BURCLOVER	LETTUCE, PRICKLY
CHEESEWEED (MALVA)	PIGWEEED, REDROOT
FIDDLE NECK, COAST	PURSLANE, COMMON
FILAREE, BROADLEAF	REDMAIDS
FILAREE, REDSTEM	ROCKET, LONDON
FILAREE, WHITESTEM	SHEPHERDSPURSE
GROUNDSEL, COMMON	SOWTHISTLE, ANNUAL
HENBIT	SPURGE, PROSTRATE
KNOTWEED, PROSTRATE	SPURGE, SPOTTED
LAMBSQUARTERS, COMMON	

TIMING AND METHOD OF APPLICATION

For optimum weed control, Oxyfluorfen 4SC should be applied prior to weed emergence. Postemergence applications should be applied to seedling weeds (up to the 6-leaf stage). Applications must be made prior to bud break of either transplants or established eucalyptus trees.

Oxyfluorfen 4SC should 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 should be increased as weed height and density increase. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment should be calibrated carefully before each use.

EUCALYPTUS SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Oxyfluorfen 4SC should only be applied to dormant healthy eucalyptus stock.

Do not apply more than 4 pints (2.0 lb active) per treated acre per growing season as a result of single or multiple applications.

FALLOW BED

GROUND OR AERIAL APPLICATION OF Oxyfluorfen 4SC ON FALLOW BEDS

GENERAL INFORMATION

Oxyfluorfen 4SC is effective as a preemergence and/or postemergence herbicide when used alone or in a tank mix combination with glyphosate for the control of winter annual broadleaf weeds to be planted to the crops listed below.

MINIMUM TREATMENT - PLANTING INTERVAL

	Oxyfluorfen 4SC Use Rate	
	up to 0.5 pint/acre	up to 1 pint/acre
DIRECT SEEDED CROPS		
CARROT	90 DAYS	90 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 CEREAL	60 DAYS	60 DAYS
GRAINS	10 MONTHS	10 MONTHS
(includes barley, buckwheat, corn, proso millet, pearl millet, oats, popcorn, rice, rye, sorghum, triticale, wheat, wild rice)		
COTTON AND SOYBEAN	(See specific labeling for fallow beds to be planted to cotton or soybeans)	

	Oxyfluorfen 4SC Use Rate	
	up to 0.5 pint/acre	up to 1 pints/acre
TRANSPLANTED CROPS		
BROCCOLI	0 DAYS	30 DAYS
CABBAGE	0 DAYS	30 DAYS
CAULIFLOWER	30 DAYS	30 DAYS
CELERY	0 DAYS	0 DAYS
CONIFER	0 DAYS	30 DAYS
GARLIC	0 DAYS	0 DAYS
GRAPE/KIWI	0 DAYS	0 DAYS
ONION	0 DAYS	30 DAYS
PEPPER STRAWBERRIES	30 DAYS	30 DAYS
TOMATO	30 DAYS	30 DAYS
TREEFRUIT/NUT/CITRUS	30 DAYS	30 DAYS
	0 DAYS	0 DAYS

IMPORTANT:

The fallow beds should be worked thoroughly to a depth of at least 2.5 inches prior to planting; weed control should not be expected following breaking of the soil surface. FAILURE TO ACHIEVE THOROUGH AND COMPLETE INCORPORATION, OR TO FOLLOW THE RECOMMENDED 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.

Oxyfluorfen 4SC USED ALONE

DOSAGE

Oxyfluorfen 4SC may be applied at 0.5 to 1 pint (0.25 to 0.51b active) per broadcast acre. The lower rate (0.5 pint per acre) should provide 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) should provide 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.

WEEDS CONTROLLED

Oxyfluorfen 4SC should provide preemergence and postemergence* control of the following weeds when used at recommended dosages and weed stage.

CHEESEWEED (MALVA)	MUSTARD, SPECIES
FIDDLENECK, COAST	NETTLE, BURNING
FILAREE, BROADLEAF	REDMAIDS
FILAREE, REDSTEM	ROCKET, LONDON
GROUNDSEL, COMMON	SHEPHERDSPURSE
HENBIT	SOWTHISTLE, ANNUAL
MINERSLETTUCE	

*Thorough spray coverage is essential to maximize the postemergence activity of Oxyfluorfen 4SC. For postemergence control when applied by air, a tank mixture of Oxyfluorfen 4SC with glyphosate is recommended.

Oxyfluorfen 4SC is a contact herbicide; therefore, coverage is essential for acceptable postemergence control. If dense weed populations, oversized weed seedlings, volunteer grains, annual grasses or unfavorable environmental conditions exist, a tank mixture of Oxyfluorfen 4SC with glyphosate for postemergence control is recommended.

TANK MIXES WITH Oxyfluorfen 4SC

IMPORTANT: Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mix, the most restrictive situation must apply.

DOSAGE

Oxyfluorfen 4SC can be tank mixed with glyphosate to provide postemergence control of annual grass weeds, volunteer grains and broadleaf weeds. Tank mix 0.5 to 1 pint (0.25 to 0.5 lb active) of Oxyfluorfen 4SC with labeled rates of glyphosate. Apply at the recommended rates and growth stages to susceptible weed species in a manner consistent with the respective labels.

METHOD OF APPLICATION

GROUND APPLICATION

Oxyfluorfen 4SC should be applied in a minimum of 20 gallons of water per acre. The volume of water used should be increased as the weeds become taller and more dense. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment should be calibrated carefully before each use.

AERIAL APPLICATION

Oxyfluorfen 4SC should be applied using swirl jet or hollow cone nozzles and a spray pressure less than 40 psi to deliver a minimum spray volume of 10 gallons per acre (minimum 5 GPA for Oxyfluorfen 4SC/glyphosate tank mix). Applications should be made at a height of 6 to 10 feet above the soil surface. It is suggested that the nozzles on the spray booms should not be placed any closer to the wing or rotor tips than 3/4 of the span; this will minimize the formation of spray or wing tip vortex roll. Nozzles should 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.

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. USE THE FOLLOWING GUIDELINES WHEN AERIAL APPLICATIONS ARE TO BE MADE.

1. Do not apply when the wind direction is not stable, when inversion conditions exist, or when wind velocity exceeds 10 mph.
2. 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 the following:
Maintain a minimum downwind buffer zone of:
 - 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-targeted vegetable fallow beds.
3. When wind speeds are between 5 and 10 mph, downwind buffer zones in excess of those listed above are suggested.
4. For upwind and side borders, maintain a minimum buffer zone of 150 feet from any non-targeted vegetable fallow bed, crop, or desirable vegetation.

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

IMPORTANT

Aerial applicators must be familiar with the EPA-registered label and follow the use precautions. Spraying Oxyfluorfen 4SC in a manner other than as recommended is done at the user's risk. Users are responsible for all loss or damage that may result from such spraying. In addition, aerial applicators should follow all applicable state and local regulations and ordinances. In interpreting the label and local regulations, the most restrictive situations should apply to avoid drift hazards.

FALLOW BED - SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

- Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.
- Do not apply more than 1 pint (0.5lb active) of Oxyfluorfen 4SC per acre per fallow season.

FALLOW BED (COTTON/SOYBEANS)

GROUND OR AERIAL APPLICATION OF Oxyfluorfen 4SC ON FALLOW BEDS (TO BE PLANTED TO COTTON OR SOYBEANS) NOT FOR USE ON FALLOW BEDS TO BE PLANTED TO SOYBEANS IN CALIFORNIA

GENERAL INFORMATION

Oxyfluorfen 4SC 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. Do not apply GoalTender within 7 days prior to planting. The fallow beds should be worked thoroughly to a depth of at least 2 inches prior to planting. It is important to thoroughly break the soil surface prior to planting. Weed control should not be expected following breaking of the soil surface.

EXERCISE EXTREME CARE TO AVOID HERBICIDE CONTACT WITH ANY DESIRABLE DORMANT OR NON-DORMANT CROP, PLANT, TREE OR VEGETATION AS SEVERE INJURY MAY RESULT.

Oxyfluorfen 4SC USED ALONE

DOSAGE

Oxyfluorfen 4SC may be applied at 0.5 to 1 pint (0.25 to 0.5lb active) per broadcast acre. The lower rate (0.5 pint per acre) should provide 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) should provide 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.

WEEDS CONTROLLED

Oxyfluorfen 4SC should provide preemergence and postemergence control of the following weeds when used at recommended dosages and weed stage.

BUTTERCUP, SMALLFLOWER	MUSTARD SPECIES
CHEESEWEED (MALVA)	NETTLE, BURNING
**EVENINGPRIMROSE, CUTLEAF	OXALIS
FIDDLENECK, COAST	PIGWEEED, REDROOT
FILAREE, BROADLEAF	PURSLANE, COMMON
FILAREE, REDSTEM	REDMAIDS
GERANIUM, CAROLINA	ROCKET, LONDON
GROUNDCHERRY, CUTLEAF	SHEPHERDSPURSE
GROUNDSEL, COMMON	SIDA, PRICKLY
HENBIT	SOWTHISTLE, ANNUAL
LADYSTHUMB	VELVETLEAF (WILD COTTON)
MINERSLETTUCE	

-Thorough spray coverage is essential to maximize the postemergence activity of Oxyfluorfen 4SC. For postemergence control when applied by air, a tank mixture of Oxyfluorfen 4SC with either glyphosate or paraquat is recommended.

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

TANK MIXES WITH Oxyfluorfen 4SC

IMPORTANT: Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mix, the most restrictive situations must apply.

DOSAGE

Oxyfluorfen 4SC can be tank mixed with either glyphosate or paraquat to obtain postemergence control of annual grass weeds, volunteer grains and broad leaf weeds. Tank mix 0.5 to 1 pint (0.25 to 0.5 lb active) of Oxyfluorfen 4SC with labeled rates of either glyphosate or paraquat. Apply at the recommended rates and growth stages to susceptible weed species in a manner consistent with the respective labels.

OUTSIDE OF CALIFORNIA: For enhanced contact activity (burndown/suppression) to either glyphosate or paraquat, add Oxyfluorfen 4SC at a rate of 3.25 ounces (0.1 lb active) per acre to labeled rates of either glyphosate or paraquat. Apply at the recommended rates and growth stages to susceptible weed species in a manner consistent with the respective labels.

If a fallow bed treatment is applied thirty days or more prior to planting and at least three significant rainfalls (0.25 inch or greater) have occurred following application, cotton or soybeans can be planted directly into the stale seedbed. If these conditions cannot be met, soil incorporation is required as directed above.

METHOD OF APPLICATION

GROUND APPLICATION

Oxyfluorfen 4SC should be applied in a minimum of 20 gallons of water per acre. The volume of water used should be increased as the weeds become taller and more dense. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment should be calibrated carefully before each use.

AERIAL APPLICATION

Oxyfluorfen 4SC should be applied 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 (in California, minimum 10 GPA when applied alone or tank mixed with paraquat [I]). Applications should be made at a height of 6 to 10 feet above the soil surface. It is suggested that the nozzles on the spray booms should not be placed any closer to the wing or rotor tips than 3/4 of the span; this will minimize the formation of spray or wing tip vortex roll. Nozzles should 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.

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. USE THE FOLLOWING GUIDELINES WHEN AERIAL APPLICATIONS ARE TO BE MADE.

1. Do not apply when the wind direction is not stable, when inversion conditions exist, or when wind velocity exceeds 10 mph.
2. 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 the following:
Maintain a minimum downwind buffer zone of:
 - 150 feet from dormant treefruit/nut/vine crops and overwintering sugar beets.
 - 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seedling sugar beets, and non-targeted vegetable fallow beds.
3. When wind speeds are between 5 and 10 mph, downwind buffer zones in excess of those listed above are suggested.
4. For upwind and side borders, maintain a minimum buffer zone of 150 feet from any non-targeted vegetable fallow bed, crop, or desirable vegetation.

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

IMPORTANT

Aerial applicators must be familiar with the EPA-registered label and follow the use precautions. Spraying Oxyfluorfen 4SC in a manner other than as recommended is done at the user's risk. Users are responsible for all loss or damage that results from such spraying. In addition, aerial applicators should follow all applicable state and local regulations and ordinances. In interpreting the label and local regulations, the most restrictive situations should apply to avoid drift hazards.

FALLOW BED (COTTON/SOYBEANS)

SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.
Do not apply more than 1 pint (0.5 lb active) of Oxyfluorfen 4SC per acre per fallow season.
Do not apply Oxyfluorfen 4SC within 7 days prior to planting of cotton or soybeans.

GARBANZO BEANS

FOR USE ONLY IN ARIZONA AND CALIFORNIA

GENERAL INFORMATION

Oxyfluorfen 4SC is effective as a preemergence herbicide when used alone for the control of listed annual broadleaf weeds in garbanzo beans. Preemergence control is most effective when spray is applied to clean, weed-free soil surfaces. Seedling weeds are controlled as they come in contact with soil-applied herbicide during emergence. Timely cultivations will usually assist in weed control.

Garbanzo beans are tolerant to preemergence applications of Oxyfluorfen 4SC, however, under certain conditions, Oxyfluorfen 4SC can cause severe but temporary crop injury. Heavy splashing rain shortly after crop emergence or wet soil conditions during early growth stages can produce leaf cupping, crinkling, stunting or defoliation of the garbanzo seedlings. When injury occurs, it is often limited to the first few leaves that develop shortly after crop plants emerge from the soil. Delays in crop development and/or maturity may result. Garbanzo beans do recover from this injury with little to no impact on yield.

Oxyfluorfen 4SC USED ALONE

DOSAGE

Oxyfluorfen 4SC is recommended for preemergence control of susceptible winter annual broadleaf weeds at 0.5 pint (0.25lb active) per broadcast acre.

WEEDS CONTROLLED PREEMERGENCE

Oxyfluorfen 4SC used alone at recommended dosages provides preemergence control of the following broadleaf weeds:

GROUNDSEL, COMMON	ROCKET, LONDON
MALLOW, LITTLE	SHEPHERDSPURSE

TIMING AND METHOD OF APPLICATION

As a preemergence application, apply in a minimum of 25 gallons of water per acre. Use conventional ground spray equipment to make a single broadcast application, after planting but prior to weed and crop emergence, with flat fan or hollow cone nozzles. Spray equipment should be calibrated carefully before each use.

GARBANZO BEANS - SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Do not apply more than 0.5 pint (0.25lb active) per broadcast acre of Oxyfluorfen 4SC in a single application.
For application only in Arizona and California.
Do not feed bean, vines or hay.

GARLIC

GENERAL INFORMATION

Oxyfluorfen 4SC may be used as a postemergence application to direct-seeded and transplanted garlic for early postemergence control of listed annual broadleaf and grass weeds. Initial spray application should be made only when the garlic plants have reached the development stage specified in the DOSAGE section and the SPECIFIC USE RESTRICTIONS section of this label. On garlic transplants spray as soon after transplanting as practical. Oxyfluorfen 4SC can cause necrotic lesions, twisting, pigtail or stunting of the garlic plants. Injury will be

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more severe if applications are made immediately following or during cool, wet weather and/or applications are made prior to the development stage of the garlic plants as specified in the DOSAGE section and the SPECIFIC USE RESTRICTIONS section of this label.

DOSAGE

SEEDED GARLIC

NORTHEASTERN STATES (CONNECTICUT, MAINE, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, RHODE ISLAND AND VERMONT)

Oxyfluorfen 4SC is recommended for postemergence control at 1 to 2 fluid ounces (0.03 to 0.061b active) per acre when applied postemergence to seeded garlic that has at least three (3) true leaves. Multiple treatments at the aforementioned rate may be applied. Do not apply more than 1 pint (0.5 lb active) per broadcast acre of Oxyfluorfen 4SC as a result of multiple applications in one season.

WESTERN STATES (ARIZONA, COLORADO, IDAHO, NEVADA, NEW MEXICO, OREGON, TEXAS, UTAH AND WASHINGTON)

Oxyfluorfen 4SC is recommended for postemergence control at 0.25 to 0.5 pint (0.12 to 0.25 lb active) per acre when applied postemergence to garlic that has at least two (2) true leaves. Multiple treatments at the aforementioned rates may be applied. Do not apply more than 1.25 pints (0.5 lb active) per broadcast acre of Oxyfluorfen 4SC as a result of multiple applications in one season.

CALIFORNIA ONLY

GENERAL INFORMATION

Oxyfluorfen 4SC is a selective for preemergence use (by air, ground, or sprinkler application), post-direct use when applied by ground equipment, or postemergence (over the top) application when applied via sprinkler irrigation for control of listed broadleaf and grass weeds in garlic in California.

Chemigation: For application using only solid set or portable lateral sprinkler irrigation systems, apply Oxyfluorfen 4SC at the recommended broadcast application rate per acre as described below. Follow the application directions for "Sprinkler Chemigation" given in the CHEMIGATION section of this label.

Preemergence Garlic Applications in California

Apply Oxyfluorfen 4SC at a rate of 0.5 pint (0.25lb active) per broadcast acre as a preemergence application to garlic. Methods of application may be ground, sprinkler, or aerial.

Ground Application: If applied using ground application equipment, Oxyfluorfen 4SC should be applied in a minimum of 20 gallons per acre. Use conventional ground spray equipment with flat nozzles at 20 to 40 psi.

Sprinkler Chemigation: Apply Oxyfluorfen 4SC at the recommended broadcast application rate. Sufficient sprinkler irrigation water should be applied to insure water penetration to a depth of two inches.

Aerial Application: If applied using aerial application, Oxyfluorfen 4SC should be applied using swirl jet or hollow cone nozzles and a spray pressure less than 40 psi to deliver a minimum spray volume of 10 gallons per acre. Applications should be made at a height of 0 to 10 feet above the soil surface. It is suggested that the nozzles on the spray booms should not be placed any closer to the wing or rotor tips than 3/4 of the span; this will minimize the formation of spray or wing tip vortex roll. Nozzles should 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.

Garlic Response to Preemergence Applications with Oxyfluorfen 4SC: A chlorotic band around some of the leaves may be observed () the first irrigation (or rainfall) following garlic emergence. Symptoms may be more severe if garlic emerges under cool, wet, overcast, or foggy weather. This condition is temporary and should not affect the vigor or development of the garlic plant.

Postemergence (and Directed) Garlic Applications in California

Apply Oxyfluorfen 4SC at rates up to 0.5 pint (0.25 lb active) per broadcast acre as a postemergence (or directed) application in garlic. The garlic must be at least 12 inches in height at application. Weeds should be in the seedling stage, young, and actively growing. Methods of application may be post-directed or by sprinkler chemigation.

Post Direct Application: For banded application, the amount of Oxyfluorfen 4SC used per acre should be reduced according to the following formula:

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

Accurate, uniform placement of Oxyfluorfen 4SC spray is essential for effective weed control and to minimize garlic injury. As a directed, postemergence application, Oxyfluorfen 4SC should be applied using a low-pressure sprayer using a minimum of 20 gallons of spray on a broadcast acre basis. Apply Oxyfluorfen 4SC as a directed treatment to the soil area at the base of the plants and to the adjacent bed top and furrow areas. Nozzles should be adjusted to cover the weed foliage with minimum contact to the garlic plant. Reduce tractor speed and smooth furrows to minimize excessive bouncing of the spray boom.

Sprinkler Chemigation: Apply Oxyfluorfen 4SC at the recommended broadcast application rate. Sufficient sprinkler irrigation water should be applied to insure water penetration to a depth of two inches.

Garlic Response to Postemergence Applications with Oxyfluorfen 4SC: Oxyfluorfen 4SC 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 outgrow these conditions and continue to develop normally.

AVOID DRIFT: WHEN APPLYING Oxyfluorfen 4SC TO GARLIC IN CALIFORNIA, EXTREME CARE MUST BE EXERCISED TO PREVENT SPRAY DRIFT WHICH COULD RESULT IN DAMAGE TO OTHER CROPS OR DESIRABLE VEGETATION. WHEN APPLYING BY AIR OR THROUGH SPRINKLER CHEMIGATION SYSTEMS, USE THE FOLLOWING GUIDELINES:

1. Do not apply when the wind direction is not stable, when inversion conditions exist, or when wind velocity exceeds 10 mph.
2. 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 the following:
Maintain a minimum downwind buffer zone of:
 - 150 feet from dormant treefruit, dormant vines, and overwintering sugar beets.
 - 650 feet from jojoba, legumes, small grains, seedling sugar beets, pastures, and vegetable fallow beds.
3. When wind speeds are between 5 and 10 mph, downwind buffer zones in excess of those listed above are suggested.
4. For upwind and side borders, maintain a minimum buffer zone of 150 feet from any vegetable fallow bed, crop, or desirable vegetation.

Cultural Considerations for use in California

On mineral soils, in order to provide maximum preemergence activity, the soil surface should be smooth and free of excessive trash (clippings, dead weeds, etc.). Cultural practices that result in redistribution or disturbance of the soil surface after spraying or that mix untreated soil in treated areas will reduce the effectiveness of the treatment. The best results from Oxyfluorfen 4SC are from applications on established beds that are left undisturbed during the time period for which weed control is desired.

ALL OTHER STATES

Oxyfluorfen 4SC is recommended for postemergence control at 0.25 pint (0.12 lb active) per acre when applied postemergence to garlic that has at least two (2) true leaves. Multiple treatments at the aforementioned rates may be applied. Do not apply more than 1 pint (0.5 lb active) per broadcast acre of Oxyfluorfen 4SC as a result of multiple applications in one season.

TRANSPLANTED GARLIC

Transplanted garlic is most tolerant of a postemergence application immediately after transplanting. For all states except the northeastern states listed under the DOSAGE - SEEDED GARLIC section, an application of up to 1 pint (0.5 lb active) per acre within two days after transplanting may be made. If less than 1.25 pints 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 active) per broadcast acre of Oxyfluorfen 4SC as a result of multiple applications in one season.

For transplanted garlic in the northeastern states, apply the same rates listed in the DOSAGE - SEEDED section within two days after transplanting.

Dosages listed are for broadcast application. For banded application, the amount of Oxyfluorfen 4SC used per acre should be reduced according to the following formula:

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

WEEDS CONTROLLED

Oxyfluorfen 4SC will provide postemergence control of the following weeds when applied at the recommended dosage and leaf stage (2 to 4 leaves).

CANARYGRASS (ANNUAL)	EVENINGPRIMROSE, CUTLEAF
GROUNDSEL, COMMON	PUNCTUREVINE
MALLOW LITTLE (MALVA)	NIGHTSHADE, BLACK
*PIGWEEED, PROSTRATE	*PURSELANE, COMMON
*PIGWEEED, REDROOT	ROCKET, LONDON
SAGE, LANCELEAF	*SHEPHERDSPURSE
SOWTHISTLE, ANNUAL	

*Specific weeds controlled at rates recommended for use in Northeastern States (see DOSAGE section).

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TIMING AND METHOD OF APPLICATION

For best postemergence control of susceptible weeds, when the weeds are in the 2 to 4-leaf stage. Application of Oxyfluorfen 4SC after the weeds exceed the maximum leaf stage may result in reduced weed control. More than one postemergence application may be necessary to control subsequent weed flushes. Oxyfluorfen 4SC should be thoroughly mixed with clean water at recommended concentrations, and applied in a minimum of 40 gallons of water per acre. Use conventional ground spray equipment with flat fan spray nozzles at 20 to 40 psi. Accurately calibrate spray equipment prior to each use. Avoid drift to all other crops and non-target areas. Thoroughly flush the spray equipment (tank, hose, pump, and boom) with water before and after each use. Residual Oxyfluorfen 4SC remaining in spray equipment may damage other crops.

GARLIC - SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

In all states except Northeastern states, do not start spraying until the garlic (direct seeded) have two (2) fully developed true leaves. In the Northeastern states (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont), do not start spraying until the garlic (direct seeded) have three (3) fully developed true leaves. Applications made prior to the recommended garlic development stage may result in serious injury and is not recommended.

Do not apply more than a total of 1 pint (0.5 lb active) per acre of Oxyfluorfen 4SC during one use season.

Do not apply within 60 days of harvest.

Use only on dry bulb garlic.

Do not apply to garlic grown for seed.

Do not mix Oxyfluorfen 4SC with oils, surfactants, liquid fertilizers or pesticides except as specified on other approved Source Dynamics Supplemental Labeling.

Do not apply Oxyfluorfen 4SC preemergence to direct-seeded garlic. 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.

GUAVA

FOR USE ONLY IN HAWAII

GENERAL INFORMATION

Oxyfluorfen 4SC is effective as a preemergence herbicide when used alone for the control of listed annual broadleaf weeds in bearing and non bearing guava plantings.

For broader spectrum postemergence control of grass and broadleaf weeds, a tank mixture of either paraquat or glyphosate with Oxyfluorfen 4SC can be applied to seedling weeds. Check labels of tank mix partners to determine suitability and use rates for crop.

Oxyfluorfen 4SC USED ALONE

DOSAGE

Oxyfluorfen 4SC is recommended for postemergence control of susceptible weeds at 1 to 4 pints (0.5 to 2.0 lb active) per broadcast acre. For preemergence control of susceptible weeds, use 2.5 to 4 pints (1.25 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre.

WEEDS CONTROLLED POSTEMERGENCE

Apply 1 to 4 pints (0.5 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre. Applications to weeds beyond the 4-leaf stage may result in partial control.

PURSLANE, COMMON

SPURGE, GARDEN

WEEDS CONTROLLED PREEMERGENCE

Apply 2.55 to 4 pints (1.25 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre.

AGERATUM
BUTTONWEED
CROTALARIA

PURSLANE, COMMON
SPURGE, GARDEN

TIMING AND METHOD OF APPLICATION

Treatments should be applied only to healthy guava trees. Care must be taken to prevent direct spray or drift from contacting green stems, fruit or foliage, as injury may result. Applications should be made only after new foliage has hardened off, or injury may result.

As a preemergence or postemergence treatment to weeds, apply in a minimum of 15 gallons of water per acre. Use higher volumes to assure adequate coverage in high densities of emerged weeds or heavy trash. Oxyfluorfen 4SC should be directed to the soil and the base of the tree. Use of a low pressure sprayer equipped with a breakaway boom and flat fan or off-center (OC) nozzles is recommended. An off-center nozzle positioned at the end of the boom may be desired. Spray shields are suggested for use in young trees.

TANK MIXES WITH Oxyfluorfen 4SC

IMPORTANT: Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

DOSAGE

For postemergence control of susceptible grass and broadleaf weeds in guava plantings, a tank mixture of Oxyfluorfen 4SC with either paraquat or glyphosate can be used. Apply at recommended rates and growth stages to susceptible weed species in a manner described on the respective labels.

WEEDS CONTROLLED POSTEMERGENCE

In addition to the weeds controlled by Oxyfluorfen 4SC used alone, control of susceptible weeds listed on the respective labels for the following products is also obtained:

paraquat glyphosate

GUAVA - SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Do not apply more than 4 pints (2.0 lb active) per broadcast acre of Oxyfluorfen 4SC in a single application or more than 8 pints (4.0 lbs active) per season.

Do not apply Oxyfluorfen 4SC within 1 day of harvest.

Direct spray toward the base of the trees. Avoid direct plant contact.

Oxyfluorfen 4SC or any of the combinations recommended on this label should be applied to only healthy growing trees.

Oxyfluorfen 4SC applications should be made only after new foliage has hardened off.

HORSERADISH

GENERAL INFORMATION

Oxyfluorfen 4SC is a selective herbicide recommended for preemergence control of listed broadleaf weeds. Applications must be made after the horseradish roots have been planted and prior to plant emergence. (Emerging plants that receive direct or indirect (drift) spray contact will be injured.) It may be desirable to cultivate immediately prior to application to remove germinated weeds.

Do not use Oxyfluorfen 4SC on horseradish plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.

DOSAGE

Apply Oxyfluorfen 4SC at a rate of 1 pint (0.5 lb active) per broadcast acre as a preemergence application to horseradish.

WEEDS CONTROLLED

Oxyfluorfen 4SC will provide preemergence control of the following weeds when used at the recommended dosage:

LAMBSQUARTERS, COMMON	SHEPHERDSPURSE
PIGWEEED, REDROOT	SMARTWEED, PENNSYLVANIA
PURSLANE, COMMON	

TIMING AND METHOD OF APPLICATION

Oxyfluorfen 4SC should be thoroughly mixed with clean water at recommended concentrations, and applied in a minimum of 20 gallons of water per acre. Use conventional ground spray equipment with flat fan nozzles at 20 to 40 psi. Accurately calibrate spray equipment prior to each use.

HORSERADISH - SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Do not apply more than 1 pint (0.5 lb active) of Oxyfluorfen 4SC per broadcast acre as a single application.

JOJOBA

GENERAL INFORMATION

Oxyfluorfen 4SC may be used for postemergence and preemergence control of listed broadleaf weeds in jojoba. Oxyfluorfen 4SC should be post-directed to the base of the jojoba plant to avoid possible phytotoxicity to the jojoba foliage. Over-the-top applications may exhibit burning, crinkling or bronzing of jojoba foliage, particularly to the youngest leaves, flowers, or buds present at the time of application.

DOSAGE

Oxyfluorfen 4SC is recommended for postemergence and preemergence control of susceptible seedling weeds (up to 12 inches in height) at 4 pints (2.0 lb active) per broadcast acre. For optimum residual control, apply during the fall or winter. For early postemergence control of susceptible seedling weeds (less than 8 inches in height) apply Oxyfluorfen 4SC at a rate of 2 pints (1.0 lb active) per broadcast acre.

WEEDS CONTROLLED POSTEMERGENCE

FIDDLENECK, COAST	MINERSLETIUCE
**FILAREE, BROADLEAF	NETTLE, BURNING
**FILAREE, REDSTEM	*PIGWEEED, RED ROOT
**FILAREE, WHITESTEM	REDMAIDS
*GROUNDSEL, COMMON	SHEPHERDSPURSE
HENBIT	SOWTHISTLE, ANNUAL
MALLOW, LITTLE (MALVA, CHEESEWEED)	

*Highest rate may be required for acceptable postemergence control.

**Oxyfluorfen 4SC at the 4-pint rate (2.0 lbs active) will provide control of filaree not exceeding the 4-inch stage. Applications to filaree beyond the 4-inch stage may result in partial control.

WEEDS CONTROLLED PREEMERGENCE

BURCLOVER	LETIUCE, PRICKLY
FIDDLE NECK, COAST	MALLOW, UTILE (MALVA, CHEESEWEED)
FILAREE, BROADLEAF	PIGWEEED, REDROOT
FILAREE, REDSTEM	PURSLANE, COMMON
FILAREE, WHITESTEM	REDMAIDS
GROUNDSEL, COMMON	ROCKET, LONDON
HENBIT	SHEPHERDSPURSE
KNOTWEED, PROSTRATE	SOWTHISTLE, ANNUAL
LAMBSQUARTERS, COMMON	

TIMING AND METHOD OF APPLICATION

Apply the first application of Oxyfluorfen 4SC after jojoba plants have grown to a minimum 6-inch height or greater. Additional applications should be applied as needed for post and preemergence weed control. Weed height should not exceed 12 inches or unsatisfactory weed control may result.

Oxyfluorfen 4SC should be applied in a minimum spray volume of 40 gallons of water per acre depending upon density of emerged weeds. Spray volume should be increased as weed height and density increase. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment should be calibrated carefully before each use.

JOJOBA - SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Avoid direct spray or drift contact of Oxyfluorfen 4SC with jojoba flowers or buds as severe injury may result.

Do not apply more than 4 pints (2.0 lb active) per broadcast care in a single application.

MINT (SPEARMINT AND PEPPERMINT)

FOR USE ONLY IN CALIFORNIA, IDAHO, MONTANA, NEVADA, OREGON, SOUTH DAKOTA, UTAH AND WASHINGTON

GENERAL INFORMATION

Oxyfluorfen 4SC may be applied for the control of listed annual grasses and broadleaf weeds in spearmint and peppermint grown in California, Idaho, Montana, Nevada, Oregon, South Dakota, Utah and Washington. Applications should only be made to spearmint and peppermint during the dormant period.

METHOD OF APPLICATION

Application must be made prior to new spring growth or before crop injury may result. Oxyfluorfen 4SC should be thoroughly mixed with clean water at recommended concentration and applied at 20 to 40 psi in 20 to 40 gallons of water per acre.

WEEDS CONTROLLED

When Oxyfluorfen 4SC is applied as a dormant application at recommended dosages in spearmint and peppermint, the following annual weeds are controlled:

BEDSTRAW, CATCHWEED	NIGHTSHADE, HAIRY
*BLUEGRASS, ANNUAL	*OATS, WILD
FLIXWEED	ORACH, RED
GROUNDSEL, COMMON	PEPPERWEED, YELLOWFLOWER
LAMBSQUARTERS, COMMON	PIGWEEED, RED ROOT
LETTUCE, PRICKLY (CHINA	*RYEGRASS, ITALIAN
	SHEPHERDSPURSE
LETTUCE) MUSTARD,	SOWTHISTLE, ANNUAL
BLUE (PURPLE MUSTARD)	TANSYMUSTARD
MUSTARD, TUMBLE (JIM HILL	THISTLE, RUSSIAN
MUSTARD)	

*Control of annual grasses is best obtained when Oxyfluorfen 4SC 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.

WESTERN OREGON

PEPPERMINT (WILLAMETTE VALLEY)

Apply 1 to 1.5 pints (0.5 to 0.75 lb active) of Oxyfluorfen 4SC from November through February to dormant peppermint only. Treatments in January or February generally provide better residual preemergence control of annual broadleaf weeds. Full season weed control should not be expected from this treatment.

- **DO NOT APPLY Oxyfluorfen 4SC IN THE WILLAMETTE VALLEY TO MINT THAT HAS BEEN PLOWED.**

**OREGON AND WASHINGTON (EAST OF CASCADES)
CALIFORNIA, MONTANA, IDAHO, NEVADA, SOUTH DAKOTA
AND UTAH.**

SPEARMINT AND PEPPERMINT

Apply 2 to 4 pints (1 to 2 lb active) of Oxyfluorfen 4SC from December through March to dormant mint only. Later winter applications will provide maximum activity on summer weeds. Summer grass control may be inconsistent. For best results, fall-plowed fields should be harrowed to provide a smooth surface prior to application. Plowed fields should not be harrowed after Oxyfluorfen 4SC has been applied, as soil disturbance will decrease the herbicidal effectiveness. In furrow-irrigated fields, corrugating must be done prior to application. Corrugating after application can cover treated rows with untreated soil, resulting in poor weed control.

MINT (SPEARMINT AND PEPPERMINT)

SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Do not apply more than one application of Oxyfluorfen 4SC per season.

Apply Oxyfluorfen 4SC only to healthy spearmint and peppermint. Do not apply to spearmint or peppermint that has been weakened by disease, drought, flooding, excessive fertilizer, soil salts, previously applied pesticides, nematodes, insects, or winter injury, as severe injury may result.

MINT (SPEARMINT AND PEPPERMINT) GROWN IN MUCK SOILS

FOR USE ONLY ON MINT GROWN ON MUCK SOILS IN INDIANA, MICHIGAN, MONTANA, NORTH DAKOTA, SOUTH DAKOTA, WISCONSIN

GENERAL INFORMATION

Oxyfluorfen 4SC may be used for the control of listed annual broadleaf weeds in dormant spearmint and peppermint grown on muck soils. Note: If applied after spearmint and peppermint emerge, severe injury will result. Applications made to first year spearmint or peppermint should be made within four (4) days of planting (sprigging) to prevent excessive crop injury.

WEEDS CONTROLLED POSTEMERGENCE AND PREEMERGENCE

When Oxyfluorfen 4SC is applied at recommended dosages in spearmint and peppermint, the following weeds are controlled:

KNOTWEED, PROSTRATE	PURSLANE, COMMON
PIGWEEED, RED ROOT	

DOSAGE

Oxyfluorfen 4SC should be applied at a rate of 2 to 3 pints (1.0 to 1.5 lb active ingredient) per acre. Apply in a spray volume of 20 to 40 gallons per acre of clean water at 20 to 40 psi. When used postemergence (to weed), add an 80% active ingredient nonionic surfactant at the rate of one quart per 100 gallons of spray solution. Applications should be made before the weeds exceed four inches. It is important that applications of Oxyfluorfen 4SC be made prior to the emergence of the spearmint or peppermint.

FOR USE ONLY ON MINT GROWN ON MUCK SOILS IN INDIANA, MICHIGAN, MONTANA, NORTH DAKOTA, SOUTH DAKOTA, WISCONSIN
SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

- Use directions in this section of the label for Oxyfluorfen 4SC are applicable only to spearmint and peppermint grown on muck soils (muck soils should have organic matter content of 20% or greater).
- Apply Oxyfluorfen 4SC 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 Oxyfluorfen 4SC to mint that has emerged.
- Applications to first-year spearmint or peppermint should be made within four (4) days of planting (sprigging).

NON-CROP USE

NON-FOOD-PRODUCING, NON-CULTIVATED AGRICULTURAL OR NON-AGRICULTURAL AREAS, SUCH AS HIGHWAY AND UTILITY RIGHTS-OF-WAY, INDUSTRIAL SITES, TANK FARMS, STORAGE AREAS, AIRPORTS, FENCEROWS, AND FARMSTEADS

GENERAL INFORMATION

Oxyfluorfen 4SC is recommended for postemergence and preemergence control of listed broad leaf weeds in non-crop areas.

WEEDS CONTROLLED POSTEMERGENCE (weeds up to 4 inches high): Apply 1 to 4 pints (0.5 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre. The lower rate in the rate range is recommended for control of susceptible weeds in the early postemergence stage, less than 4 inches in height. The higher rate (2.0 lb active) should be used for weeds up to 12 inches in height. Applications to weeds beyond the 4-inch stage may result in partial control.

WEEDS CONTROLLED POSTEMERGENCE

CHEESEWEED (MALVA)
FIDDLE NECK, COAST
FILAREE, BROAD LEAF
FILAREE, REDSTEM
GROUNDSEL, COMMON
HENBIT
MINERSLETTUCE
NETTLE, BURNING
PIGWEEED, RED ROOT
PURSLANE, COMMON
REDMAIDS
SHEPHERDSPURSE
SOWTHISTLE, ANNUAL

WEEDS CONTROLLED PREEMERGENCE: Apply 2.5 to 4 pints (1.25 to 2.0 lb active) per broadcast acre.

WEEDS CONTROLLED PREEMERGENCE

BURCLOVER
CHEESEWEED (MALVA)
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

TIMING AND METHOD OF APPLICATION

Oxyfluorfen 4SC should 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 should be increased as the weeds become taller and more dense. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment should be calibrated carefully before each use.

TANK MIXES WITH Oxyfluorfen 4SC

IMPORTANT: Read and observe all directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

DOSAGE

For preemergence control of susceptible grass and broadleaf weeds, a tank mixture of Oxyfluorfen 4SC with diuron (Karmex) or simazine can be applied. Apply at the recommended rates and growth stages to susceptible weed species in a manner described on the respective labels.

For postemergence control of susceptible grass and broadleaf weeds, a tank mixture with paraquat or glyphosate with Oxyfluorfen 4SC can be used. Apply at the recommended rates and growth stages to susceptible weed species in a manner described on the respective labels.

SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Do not feed or allow animals to graze on any areas treated with Oxyfluorfen 4SC.

ONIONS

GENERAL INFORMATION

Oxyfluorfen 4SC may be used as a postemergence application to direct-seeded and transplanted onions for early postemergence control of listed annual broadleaf and grass weeds. Initial spray application should be made only when the onions have reached the development stage specified in the DOSAGE section and the SPECIFIC USE RESTRICTIONS section of this label. On onion transplants spray as soon before or after transplanting as practical. Oxyfluorfen 4SC 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 development stage of the onion plants as specified in the DOSAGE section and the SPECIFIC USE RESTRICTIONS section of this label.

DOSAGE

SEEDED ONIONS

NORTHEASTERN STATES (CONNECTICUT, MAINE, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, RHODE ISLAND AND VERMONT)

Oxyfluorfen 4SC is recommended for postemergence control at 1 to 2 fluid ounces (0.03 to 0.06 lb active) per acre when applied postemergence to seeded onions that have at least three (3) true leaves. Multiple treatments at the aforementioned rate may be applied. Do not apply more than 1 pint (0.5 lb active) per broadcast acre of Oxyfluorfen 4SC as a result of multiple applications in one season.

WESTERN STATES (ARIZONA, CALIFORNIA, COLORADO, IDAHO, NEVADA, NEW MEXICO, OREGON, TEXAS, UTAH AND WASHINGTON)

Oxyfluorfen 4SC is recommended for postemergence control at 0.25 to 0.5 pint (0.12 to 0.25 lb active) per acre when applied postemergence to onions that have at least two (2) true leaves. Multiple treatments at the aforementioned rates may be applied. Do not apply more than 1 pint (0.5 lb active) per broadcast acre of Oxyfluorfen 4SC as a result of multiple applications in one season.

CHEMIGATION: For application using sprinkler irrigation (solid set or portable lateral) systems, apply specified dosage of Oxyfluorfen 4SC per acre as described in this section. Follow all directions given in the CHEMIGATION section of this label when making applications using irrigation systems.

AVOID DRIFT

WHEN APPLYING TO ONIONS, EXTREME CARE MUST BE EXERCISED TO PREVENT SPRAY DRIFT WHICH COULD RESULT IN DAMAGE TO OTHER CROPS OR DESIRABLE VEGETATION. USE THE FOLLOWING GUIDELINES WHEN APPLICATIONS OF Oxyfluorfen 4SC ARE TO BE MADE THROUGH THE SPRINKLER IRRIGATION SYSTEM:

- 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 treefruit, 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.

ALL OTHER STATES

Oxyfluorfen 4SC is recommended for postemergence control at 0.25 pints (0.12 lb active) per acre when applied postemergence to onions that have at least two (2) true leaves. Multiple treatments at the aforementioned rates may be applied. Do not apply more than 1 pint (0.5 lb active) per broadcast acre of Oxyfluorfen 4SC as a result of multiple applications in one season.

TRANSPLANTED ONIONS

POST TRANSPLANT: Transplanted onions are most tolerant of a postemergence application immediately after transplanting. For all states except the northeastern states listed under the DOSAGE SEEDED ONIONS section, an application of up to 1 pint (0.5 lb active) per acre within two days after transplanting may be made. If less than 1 pint 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 active) per broadcast acre of Oxyfluorfen 4SC as a result of multiple applications in one season.

CHEMIGATION: For application using sprinkler irrigation (solid set or portable lateral) systems, apply specified dosage of Oxyfluorfen 4SC per acre as described in this section. Follow all directions given in the CHEMIGATION section of this label when making applications using irrigation systems.

For transplanted onions in the northeastern states, apply the same rates listed in the DOSAGE - SEEDED ONIONS section within two days after transplanting.

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PRE-TRANSPLANT: (Not for use in Northeastern or Western states, except as specifically directed on other approved supplemental labeling.)

Oxyfluorfen 4SC is recommended for use as a pre-transplant application at 0.5 to 1 pint (0.25 to 0.5 lb active) per broadcast acre. Applications must be made after completion of soil preparation, but prior to transplanting of onion plants. Transplanting should be completed with minimal soil disturbance. Treated soil surfaces should be left undisturbed after transplanting to obtain greatest benefit of Goal herbicide on susceptible annual broadleaf weeds during the time period for which weed control is desired. However, timely cultivations after weed emergence will assist in weed control. If less than 1 pint per acre is applied as a pre-transplant treatment, postemergence applications can be made as instructed in the DOSAGE - SEEDED ONIONS section of this label. Do not exceed the maximum use rate of 1 pint (0.5 lb active) per broadcast acre of Oxyfluorfen 4SC as a result of multiple applications in one season.

Dosages listed are for broadcast application. For banded application, the amount of Oxyfluorfen 4SC used per acre should be reduced according to the following formula:

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

WEEDS CONTROLLED

Oxyfluorfen 4SC will provide postemergence control of the following weeds when applied at the recommended dosage and leaf stage (2 to 4 leaves):

- | | |
|---------------------------|----------------------|
| CANARYGRASS (ANNUAL) | PUNCTUREVINE |
| *EVENINGPRIMROSE, CUTLEAF | **PURSLANE, COMMON |
| GROUNDSEL, COMMON | ROCKET, LONDON SAGE, |
| MALLOW, LITTLE (MALVA) | LANCE LEAF |
| NIGHTSHADE, BLACK | **SHEPHERDSPURSE |
| **PIGWEEED, PROSTRATE | SOWTHISTLE, ANNUAL |
| *,**PIGWEEED, REDROOT | |

*Weeds controlled when applied as a pre-transplant application. In addition, Oxyfluorfen 4SC at the rate of 1 to 1 pint per acre will provide control/suppression of carpetweed, Pennsylvania smartweed, galinsoga, common lambsquarters, and wild mustard. Applications of Oxyfluorfen 4SC to muck soils may result in partial control or suppression of the weeds listed.

*Specific weeds controlled at rates recommended for use in Northeastern states (see DOSAGE section).

TIMING AND METHOD OF APPLICATION

For best postemergence control of susceptible weeds, apply when the weeds are in the 2-to 4-leaf stage. Application of Oxyfluorfen 4SC after the weeds exceed the maximum leaf stage may result in reduced weed control. More than one postemergence application may be necessary to control subsequent weed flushes.

Oxyfluorfen 4SC should be thoroughly mixed with clear water at recommended concentrations, and applied in a minimum of 40 gallons of water per acre. Use conventional ground spray equipment with flat fan spray nozzles at 20 to 40 psi. Accurately calibrate spray equipment prior to each use. Avoid drift to all other crops and non-target areas. Thoroughly flush the spray equipment (tank, hose, pump, and boom) with water before and after each use. Residual Oxyfluorfen 4SC remaining in spray equipment may damage other crops.

ONIONS - SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

In all states, except Northeastern states, do not start spraying until the onions (direct-seeded) have two (2) fully developed true leaves. In the Northeastern states (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont), do not start spraying until the onions (direct-seeded) have three (3) fully developed true leaves. Applications made prior to the recommended onion development stage may result in serious injury and is not recommended.

Do not apply more than a total of 1 pints (0.51b active) per acre of Oxyfluorfen 4SC during one use season.

Do not apply within 45 days of harvest.

Use only on dry bulb onions.

Do not apply to onions grown for seed, except as specified on other approved supplemental labeling.

Tank mixtures of Oxyfluorfen 4SC with oils, surfactants, liquid fertilizers or other pesticides may result in enhanced crop response/injury and are the responsibility of the user.

Do not apply Oxyfluorfen 4SC preemergence to direct-seeded onions. 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.

ONIONS GROWN FOR SEED

GENERAL INFORMATION

Oxyfluorfen 4SC may be used as a postemergence application to onions grown for seed, for early postemergence control of listed annual broadleaf and grass weeds. Initial spray application should be made only when the onions have reached the development stage specified in the DOSAGE section and the SPECIFIC USE RESTRICTIONS section of this label. Oxyfluorfen 4SC 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 development stage of the onion plants as specified in the DOSAGE section and the SPECIFIC USE RESTRICTIONS section of this label.

NOTICE: Some varieties or inbred lines of onions may be more susceptible to Oxyfluorfen 4SC. Care should be taken to insure that the particular onion variety or line being grown is tolerant to Oxyfluorfen 4SC.

It is suggested that all onion varieties or lines be tested in limited areas to ensure an adequate level of crop tolerance prior to an application for postemergence weed control.

WEEDS CONTROLLED

Oxyfluorfen 4SC will provide postemergence control of the following weeds when applied at the recommended dosage and leaf stage (2 to 4 leaves):

CANARYGRASS (ANNUAL)	PUNCTUREVINE
EVENINGPRIMROSE, CUTLEAF	*PURSLANE, COMMON
GROUNDSEL, COMMON	ROCKET, LONDON
MALLOW, LITTLE (MALVA)	SAGE, LANCELEAF
NIGHTSHADE, BLACK	SHEPHERDSPURSE
*PIGWEEED, PROSTRATE	SOWTHISTLE, ANNUAL
*PIGWEEED, REDROOT	

*Specific weeds controlled at rates recommended for use in northeastern states (see DOSAGE section).

DOSAGE

NORTHEASTERN STATES (CONNECTICUT, MAINE, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, RHODE ISLAND AND VERMONT)

Oxyfluorfen 4SC is recommended for postemergence control at a maximum use rate of 1 fluid ounces (0.03 lb active) per acre when applied postemergence to seeded onions that have at least four (4) true leaves. Multiple treatments at the aforementioned rate may be applied. Do not apply more than 1 pint (0.51b active) per broadcast acre of Oxyfluorfen 4SC as a result of multiple applications in one season.

ALL OTHER STATES

Oxyfluorfen 4SC is recommended for postemergence control at a maximum use rate of 0.25 pint (0.125lb active) per acre when applied postemergence to onions that have at least three (3) true leaves. Multiple treatments at the aforementioned rates may be applied. Do not apply more than 1 pint (0.5 lb active) per broadcast acre of Oxyfluorfen 4SC in one season.

TIMING AND METHOD OF APPLICATION

For best postemergence control of susceptible weeds, apply when the weeds are in the 2 to 4-leaf stage. Application of Oxyfluorfen 4SC after the weeds exceed the maximum leaf stage may result in reduced weed control. More than one postemergence application may be necessary to control subsequent weed flushes.

Oxyfluorfen 4SC should be thoroughly mixed with clean water at recommended concentrations, and applied in a minimum of 40 gallons of water per acre. Use conventional ground spray equipment with flat fan spray nozzles, at 20 to 40 psi. Do not exceed 40 psi. Accurately calibrate spray equipment prior to each use. Thoroughly flush the spray equipment (tank, hose, pump, and boom) with water before and after each use. Residual Oxyfluorfen 4SC remaining in spray equipment may damage other crops.

CHEMIGATION: For application using sprinkler irrigation (solid set or portable lateral) systems, apply specified dosage of Oxyfluorfen 4SC per acre as described above. Follow all directions given in the CHEMIGATION section of this label when making applications using irrigation systems.

DO NOT APPLY WHEN WEATHER CONDITIONS FAVOR DRIFT. AVOID DRIFT TO ALL NON-TARGET AREAS. OXYFLUORFEN 4SC IS PHYTOTOXIC TO PLANT FOLIAGE.

AVOID DRIFT

WHEN APPLYING TO ONIONS, EXTREME CARE MUST BE EXERCISED TO PREVENT SPRAY DRIFT WHICH COULD RESULT IN DAMAGE TO OTHER CROPS OR DESIRABLE VEGETATION. USE THE FOLLOWING GUIDELINES WHEN APPLICATIONS OF Oxyfluorfen 4SC ARE TO BE MADE THROUGH THE SPRINKLER IRRIGATION SYSTEM:

- 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 treefruit, 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.

4. For upwind and side borders, maintain a minimum buffer zone of 150 feet from any vegetable fallow bed, or desirable vegetation.

ONIONS GROWN FOR SEED SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

In all states, do not start spraying until the onions have reached the minimum leaf stage specified in the DOSAGE section of this label. Applications made prior to recommended stage of onion development may result in serious injury and is not recommended. Do not apply more than a total of 1 pint (0.5 lb active) per acre of Oxyfluorfen 4SC during one use season.

Do not apply within 60 days of harvest.

Do not mix Oxyfluorfen 4SC with oils, surfactants, liquid fertilizers or other pesticides except as specified on other approved Source Dynamics Supplemental Labeling.

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.

PAPAYA

FOR USE ONLY IN HAWAII

GENERAL INFORMATION

Oxyfluorfen 4SC may be used as a post-directed application for broadleaf weed control in papaya. Occasionally, after the use of Oxyfluorfen 4SC, a spotting, crinkling or flecking may appear on the leaves of the papaya. Leaves or green stalks that receive direct or indirect (drift) spray contact will be injured.

Do not use Oxyfluorfen 4SC on papaya plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.

DOSAGE AND TIMING

Apply Oxyfluorfen 4SC at a rate of 2 pints (1.0 lb active) per broadcast acre as a directed spray to the orchard floor. The initial application should occur no earlier 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.

Oxyfluorfen 4SC provides effective control of susceptible weed seedlings in the 4-leaf stage. Do not apply more than 2.0 pints (1.0 lb active) of Oxyfluorfen 4SC per broadcast acre in a single application, or more than 6.0 pints (3.0 lb active) per broadcast acre per year as a result of multiple applications.

WEEDS CONTROLLED

Oxyfluorfen 4SC will provide preemergence and postemergence control of the following weeds when used at the recommended dosage. Application to weeds beyond the 4-leaf stage may result in partial control:

AMARANTH, SPINY
PURSLANE, COMMON

SPURGE, GARDEN

METHOD OF APPLICATION

Oxyfluorfen 4SC should be thoroughly mixed with clean water at recommended concentration, and applied in a minimum of 15 gallons of water per broadcast acre. Accurately calibrate spray equipment prior to each use.

Accurate, uniform placement of Oxyfluorfen 4SC is essential for effective weed control and to minimize crop injury. Oxyfluorfen 4SC must be applied as a directed spray to the orchard floor beneath the papaya plants. Do not allow the herbicide solution, spray, drift or mist to contact green bark, stems, fruit or foliage as injury may result. Oxyfluorfen 4SC must be applied using rigid precision ground sprayer equipment.

PAPAYA - SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

Do not allow herbicide solution, spray, drift or mist to contact green bark, stems, fruit or foliage as injury may result.

Do not apply more than 2.0 pints (1.0 lb active) of Oxyfluorfen 4SC per broadcast acre in a single directed spray or more than 6 pints (3.0 lb active) per broadcast acre per year as a result of multiple applications.

Do not apply Oxyfluorfen 4SC within 1 day of harvest. For use only in papaya grown in Hawaii.

TARO

FOR USE IN HAWAII ONLY

GENERAL INFORMATION

Oxyfluorfen 4SC may be used as a post-direct application to dryland taro for the control of listed broadleaf weeds.

NOTE: Dryland taro is defined as a taro grown without irrigation, or by using irrigation practices that do not result in runoff, 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.

Occasionally, after the use of Oxyfluorfen 4SC, a spotting, crinkling or flecking may appear on the leaves of the taro. Leaves that receive direct or indirect (drift) spray contact will be injured.

Do not use Oxyfluorfen 4SC on taro plantings that are weak, or under stress due to temperature, disease, fertilizer, nematodes, insects, pesticides, drought or excessive moisture.

DOSAGE

Apply Oxyfluorfen 4SC at a rate of 1 pint (1.0 lb active) per broadcast acre as a single preemergence application within one week after transplanting (and prior to emergence) of the taro.

Oxyfluorfen 4SC is also recommended as a post-direct application of 0.5 pint (0.25 lb active) per acre. Effective control of succulent weed seedlings in the 2-to 3-leaf stage can usually be obtained. Do not apply more than 0.5 pint (0.25 lb active) of Oxyfluorfen 4SC per acre in a single post direct application, or more than 1 pint (0.5 lb active) per broadcast acre per season as a result of multiple post-direct applications.

WEEDS CONTROLLED PREEMERGENCE-Apply 2.5 to 4 pints (1.25 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast

BURCLOVER	LAMBSQUARTERS, COMMON
CHEESEWEED (MALVA)	LETTUCE, PRICKLY
FIDDLE NECK, COAST	PIGWEEED, REDROOT
FILAREE, BROADLEAF	PURSLANE, COMMON
FILAREE, REDSTEM	REDMAIDS
FILAREE, WHITESTEM	ROCKET, LONDON
GROUNDSEL, COMMON	SHEPHERDSPURSE
HEN BIT KNOTWEED,	SOWTHISTLE, ANNUAL
PROSTRATE	

ALL STATES EXCEPT CALIFORNIA AND ARIZONA

DOSAGE

Oxyfluorfen 4SC is recommended for postemergence control at 1 to 4 pints (0.5 to 2.0 lb active) per broadcast acre. For preemergence control of susceptible weeds, use 2.5 to 4 pints (1.25 to 2.0 lb active) per broadcast acre.

WEEDS CONTROLLED POSTEMERGENCE - Apply 1 to 4 pints (0.5 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre. The lower rate is recommended for the control of susceptible seedling weeds in the early postemergence stage up to the 4-leaf stage. The higher rate (2.0 lb active) should be used for weeds up to the 6-leaf stage. Applications to weeds beyond the 6-leaf stage may result in partial control.

BALSAMAPPLE	NIGHTSHADE, BLACK
COCKLEBUR, COMMON	PEPPERWEED, VIRGINIA
-CUDWEED, NARROWLEAF	PIGWEEED, RED ROOT
--EVENINGPRIMROSE, CUTLEAF	POINSETTIA, WILD
GROUNDCHERRY, CUTLEAF	PURSLANE, COMMON
GROUNDCHERRY, WRIGHT	SESBANIA, HEMP
JIMSONWEED	SHEPHERDSPURSE
LAMBSQUARTERS, COMMON	SIDA, PRICKLY (TEAWEEED)
MORNINGGLORY, ANNUAL	SMARTWEED,
NIGHTSHADE, AMERICAN	PENNSYLVANIA
BLACK	SOWTHISTLE, ANNUAL
	VELVETLEAF

-Maximum 0.5-inch diameter
 --Highest rate and/or multiple applications may be required for acceptable control. Do not apply more than 4 pints (2.0 lb active) per broadcast acre of Oxyfluorfen 4SC in one season.

WEEDS CONTROLLED PREEMERGENCE-Apply 2.5 to 4 pints (1.25 to 2.0 lb active) of Oxyfluorfen 4SC per broadcast acre.

CAMPHORWEED	PEPPERWEED, VIRGINIA
CUDWEED, NARROWLEAF	PIGWEEED, REDROOT
-EVENINGPRIMROSE, CUTLEAF	POINSETTIA, WILD
GROUNDCHERRY, CUTLEAF	SIDA, PRICKLY
JIMSONWEED	SMARTWEED, PENNSYLVANIA
LAMBSQUARTERS, COMMON	SOWTHISTLE, ANNUAL
NIGHTSHADE, AMERICAN	SPURGE, PROSTRATE
BLACK	SPURGE, SPOTTED
NIGHTSHADE, BLACK	VELVETLEAF

-Highest rate and/or multiple applications may be required for acceptable control. Do not apply more than 4 pints (2.0 lb active) per broadcast acre of Oxyfluorfen 4SC in one season.

ALL STATES

TIMING AND METHOD OF APPLICATION

In Arizona and California, Oxyfluorfen 4SC can be applied during the period following completion of final harvest up to February 15 (February 1st in the Coachella Valley, California). Applications made after the calendar dates above, but prior to bud swell, may result in significant crop injury and are the responsibility of the user.

In all states, do not apply Oxyfluorfen 4SC after buds start to swell until completion of final harvest. Do not apply when fruit/nuts are present. Oxyfluorfen 4SC can be applied upon completion of final harvest.

As a preemergence treatment, apply a minimum of 40 gallons of water per acre. Use higher volumes to ensure adequate coverage in high densities of emerged weeds or heavy trash. Best preemergence results are achieved when spray is applied to a relatively weed-free established berm or soil surface. Oxyfluorfen 4SC should be directed to the soil and the base of dormant trees or vines. Use a low-pressure sprayer equipped with a breakaway boom and flat fan nozzles. An off-center (OC) nozzle positioned at the end of the boom may be desired. See SPECIFIC USE RESTRICTIONS for Oxyfluorfen 4SC application on dormant tree or vine plantings.

In California, Oxyfluorfen 4SC may be applied as an over-the-top or directed spray to dormant non bearing 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.

Weed Stage	SPRAY VOLUME (Gallons of Water per Acre)
Preemergence	40 or more
Postemergence (up to 4-inch or 4-leaf stage)	40 or more
Exceeding 4-inch or 4-leaf stage	100 or more

CHEMIGATION (ALL STATES): For dormant season application using sprinkler (low-volume, micro sprinkler), drip (trickle), and flood (basin) irrigation systems, apply specified dosage of Oxyfluorfen 4SC per acre as described in the applicable DOSAGE sections above. Follow all directions given in the CHEMIGATION section of this label when making applications using irrigation systems.

TANK MIXES WITH Oxyfluorfen 4SC

IMPORTANT: Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

DOSAGE

For preemergence control of susceptible grass and broadleaf weeds in certain bearing and non bearing treefruit, nut or vine plantings, a tank mixture of Oxyfluorfen 4SC with napropamide (Eavrinol); diuron (Karmex), pronamide (Kerb), simazine, norflurazon (Scliam) or pyrazalin (Surflan) can be applied. Apply at the recommended rates and growth stages to susceptible weed species in a manner described on the respective labels.

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For postemergence control of susceptible grass and broadleaf weeds in certain treefruit, nut or vine plantings, a tank mixture of glyphosate or glyphosate with Oxyfluorfen 4SC or combinations of Oxyfluorfen 4SC plus napropamide (Devrinol), diuron (Karmex), pronamide (Kerb), simazine, norflurazon (Solicam) or oryzalin (Surflan) with either paraquat or glyphosate can be used. Apply at the recommended rates and growth stages to susceptible weed species in a manner described on the respective labels.

preemergence weed control through low-volume sprinkler (micro sprinkler) or drip irrigation systems. This product may also be applied to all grapes (raisin, table, wine) when applied as a dormant application as specified above. The total amount of Oxyfluorfen 4SC applied during one season (from completion of final harvest through dormancy to nondormant use covered by this section) cannot exceed a total of 4 pints (2.0 lb active ingredient) per acre 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 systems).

WEEDS CONTROLLED

In addition to the weeds controlled by Oxyfluorfen 4SC used alone, control of susceptible weeds listed on the respective labels for the following products is also obtained:

- | | |
|------------------------|--------------------|
| diuron (Karmex) | oryzalin (Surflan) |
| glyphosate | paraquat pronamide |
| napropamide (Devrinol) | (Kerb) |
| norflurazon (Solicam) | simazine |

*In addition, simazine provides preemergence control of horseweed (marestalk).

TREEFRUIT/NUTNINE CROPS

DORMANT APPLICATION

SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

- Do not apply Oxyfluorfen 4SC during the period between bud swell and completion of final harvest or when fruit/nuts are present.
- Oxyfluorfen 4SC can be applied upon completion of final harvest. IN ARIZONA AND CALIFORNIA, Oxyfluorfen 4SC can be applied during the period following completion of final harvest up to February 15 (February 1st in the Coachella Valley, California). Applications made after the calendar dates above, but prior to bud swell, may result in significant crop injury and are the responsibility of the user.
- Do not apply more than 4 pints (2.0 lb active) per broadcast acre of Oxyfluorfen 4SC in one season.
- 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.
- Oxyfluorfen 4SC or any of the combinations recommended on this label should be applied to only healthy growing trees or vines.
- Direct spray toward the base of tree or vines unless specific recommendations allow over-the-top application. Avoid direct plant contact.

CROP TOLERANCE

The use of Oxyfluorfen 4SC may in some instances 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 leaves at the time of contact with Oxyfluorfen 4SC are the most susceptible to foliage injury. Grapes may exhibit some small blemishes (spots or flicks) on the fruit.

RATE AND APPLICATION TIMING

Applications to non-dormant grapes may be made during the period between the completion of bloom up through 14 days prior to harvest. Oxyfluorfen 4SC is recommended for use at rates of 0.5 to 1 pint (0.25 to 0.5 lb active ingredient) per broadcast acre. Do not apply more than 4 pints (2.0 lb active ingredient) per broadcast acre per season as a result of multiple applications made during the dormant and non-dormant season (up to 14 days prior to harvest).

WEEDS CONTROLLED OR SUPPRESSED POSTEMERGENCE

(Weeds up to 4 inches in height)

For postemergence control/suppression, apply 0.5 to 1 pint (0.25 to 0.5 lb active ingredient) per broadcast acre to susceptible weed seedlings up to 4 inches in height. Repeat applications may be required. Applications to weeds beyond the 4-inch stage or at reduced use rates will result in reduced herbicidal activity. For enhanced postemergence activity on listed grass and broadleaf weeds, a tank mixture of Oxyfluorfen 4SC with either paraquat or glyphosate may be used when applied as a directed spray with ground application equipment.

- | | |
|------------------------------|--------------------|
| CHEESEWEED (MALVA) | NETTLE, BURNING |
| FIDDLENECK, COAST | NIGHTSHADE, BLACK |
| GROUNDSEL, COMMON | PIGWEED, RED ROOT |
| HENBIT | PURSLANE, COMMON |
| MINERSLETTUCE | REDMAIDS |
| MORNINGGLORY SPECIES, ANNUAL | ROCKET, LONDON |
| MUSTARD, BLACK | SOWTHISTLE, ANNUAL |

GRAPES (CALIFORNIA ONLY)

NON-DORMANT APPLICATION

GENERAL INFORMATION

Oxyfluorfen 4SC may be used for control/suppression of susceptible broadleaf weeds in non-dormant grapes (raisin and wine grapes only) when applied either as a directed spray or for supplemental

Where postemergence weed activity is desired, add 1 quart of an 80% active nonionic surfactant cleared for application to growing crops) for each 100 gallons of spray.

TANK MIXTURES WITH Oxyfluorfen 4SC

IMPORTANT: Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mixture, the most restrictive label limitations must apply.

WEEDS CONTROLLED OR SUPPRESSED PREEMERGENCE
Apply 1 pint (0.5 lb active ingredient) of Oxyfluorfen 4SC per broadcast acre. Applications at reduced rates will result in reduced herbicidal activity.

BURCLOVER
CHEESEWEED, MALVA
FIDDLENECK, COAST
GROUNDSEL, COMMON
HENBIT KNOTWEED,
PROSTRATE
LAMBSQUARTERS, COMMON
MINERSLETTUCE

MUSTARD, BLACK
NETTLE, BURNING
NIGHTSHADE, BLACK
PIGWEEED, REDROOT
PURSLANE, COMMON
REDMAIDS
ROCKET, LONDON
SOWTHISTLE, ANNUAL

METHOD OF APPLICATION

Apply Oxyfluorfen 4SC at the recommended rate in a minimum of 20 gallons of water per acre (a minimum of 10 gallons per acre for Oxyfluorfen 4SC/glyphosate tank mix). Mix thoroughly. Use higher volumes to ensure adequate coverage in high densities of emerged weeds or heavy trash. Best preemergence results are achieved when spray is applied to a relatively weed-free established berm or soil surface.

Oxyfluorfen 4SC should be directed to the soil and the base of vines. Use a low-pressure sprayer equipped with a breakaway boom and flat fan nozzles. An off-center (OC) nozzle positioned at the end of the boom may be desired. Spray equipment should be calibrated carefully before each use. See SPECIFIC USE RESTRICTIONS for Oxyfluorfen 4SC application in non-dormant vine plantings.

Thoroughly flush the spray equipment (tank, hose, pump and boom) with water before and after each use. Residual Oxyfluorfen 4SC remaining in the spray equipment may damage other crops.

AVOID DRIFT TO ALL OTHER CROPS AND NONTARGET AREAS.
DO NOT APPLY WHEN WEATHER CONDITIONS FAVOR DRIFT.
Oxyfluorfen 4SC IS PHYTOTOXIC TO PLANT FOLIAGE.

CHEMIGATION APPLICATION: Oxyfluorfen 4SC may be applied using sprinkler (low volume (micro sprinkler) and drop (trickle) irrigation systems designed to distribute irrigation water beneath the vine canopy. The application of Oxyfluorfen 4SC is intended to supplement the preemergence weed control requirements of a broadcast (or directed) weed control program where weed emergence is anticipated within the wetted area of a low-volume sprinkler (micro sprinkler) or drip (trickle) irrigation system. Applications should be made prior to weed emergence since postemergence activity will be inconsistent due to partial coverage. Apply the specified dosage of Oxyfluorfen 4SC per acre as described in the DOSAGE AND APPLICATION TIMING section above for non-dormant grapes. Meter Oxyfluorfen 4SC at a continuous uniform rate during the middle 1/3 of the irrigation period to allow for uniform distribution to the soil surface. For best results, Oxyfluorfen 4SC should be uniformly positioned across the wetted area to help reduce the "ring effect" of weed escapes as other products begin to break down around the emitter. Continue irrigation during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system. Follow all directions given the CHEMIGATION section of this label when making applications using sprinkler irrigation systems. Do not allow treated irrigation water to contact the fruit or foliage.

GRAPES - NON-DORMANT APPLICATION (CALIFORNIA ONLY) SPECIFIC USE RESTRICTIONS

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

- The total amount of Oxyfluorfen 4SC applied during one season (from completion of final harvest through dormancy to non-dormant use covered by this section) cannot exceed 4 pints (2.0 lb active ingredient) per acre 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 apply within 14 days of harvest.
- Do not initiate application of Oxyfluorfen 4SC 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.
- Oxyfluorfen 4SC should be applied only by ground application equipment of through low-volume sprinkler (micro sprinkler) or drip (trickle) irrigation systems as specified above.
- Apply Oxyfluorfen 4SC as a non-dormant application to wine grapes or raisin grapes only.

GRAPES (WASHINGTON AND OREGON ONLY)

WINE AND PROCESSING ONLY

GENERAL INFORMATION

Oxyfluorfen 4SC may be used to assist with sucker control in grapes (wine and processing grapes only) when applied as a directed ground spray application to suckers growing from the base of the plant. The use of Oxyfluorfen 4SC will typically reduce (but not eliminate) the need for sucker removal by hand.

CROP TOLERANCE

The use of Oxyfluorfen 4SC may in some instance 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. Leaves that are immature or expanding leaves at the time of contact with Oxyfluorfen 4SC are the most susceptible to foliage injury. Grapes may exhibit some small blemishes (spots or flicks) on the fruit.

RATE AND APPLICATION TIMING

Apply Oxyfluorfen 4SC at a rate of 0.5 to 1 pint (0.25 to 0.5 lb active ingredient) per acre in a spray volume of 50 gallons (or more) per broadcast acre to newly emerging sucker growth, up to 12 inches in length. The highest rate and/or a second application may be required to achieve an acceptable level of control/suppression of grape suckers. Do not apply more than 4 pints (2.0 lb active ingredient) per broadcast acre per season as a result of multiple applications made during a single season (dormant and non-dormant). The use of Oxyfluorfen 4SC with typically reduce (but not eliminate) the need for sucker removal by hand. Applications may be made to non-dormant grapes up to three weeks after bloom. Do not apply within 60 days of harvest.

Add 2 pints of an 80 percent active non ionic surfactant cleared for application to growing crops) per each 100 gallons of spray.

For banded application, the amount of Oxyfluorfen 4SC recommended per acre for broadcast application may be reduced according to the following formula:

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

METHOD OF APPLICATION

Oxyfluorfen 4SC should be applied in a three-foot band directed towards the base of the grapevine. Applications are to be directed toward the lower portion of the grapevine to minimize leaf injury from spray contact. Avoid spray contact on flowers, grape clusters, or fruit. Mounted nozzles are used to deliver the spray solution. Thorough spray coverage of sucker growth is essential to maximize the activity of Oxyfluorfen 4SC. Spray equipment should be calibrated carefully before each use.

TANK MIXTURES WITH Oxyfluorfen 4SC

IMPORTANT: Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mixture, the most restrictive requirements must apply. For enhanced postemergence sucker activity, a tank mixture of Oxyfluorfen 4SC with either glufosinate (Rely) or paraquat (Extra) can be used. Apply at the recommended rates and growth stages in a manner describe on the respective labels.

**GRAPES (WASHINGTON AND OREGON ONLY)
WINE AND PROCESSING ONLY
SPECIFIC USE RESTRICTIONS**

The total amount of Oxyfluorfen 4SC applied during one crop year (dormant and non-dormant) cannot exceed 4 pints (2.0 lb active ingredient) per acre as a result of multiple applications in any give area (broadcast or banded). Oxyfluorfen 4SC should be applied only by ground application equipment. Apply Oxyfluorfen 4SC as a non-dormant application for sucker control only to wine or processed grapes. Do not apply when weather conditions favor drift. Avoid drift to all nontarget areas. Oxyfluorfen 4SC is phytotoxic to plant foliage. Do not apply Oxyfluorfen 4SC within 60 days of harvest. Do not apply Oxyfluorfen 4SC to ditch banks or waterways.

**PISTACHIOS, WALNUTS, ALMONDS
(CALIFORNIA ONLY)
NON-DORMANT APPLICATION**

GENERAL INFORMATION

Oxyfluorfen 4SC provides effective vegetation management when applied to young broadleaf weed seedlings. For enhanced postemergence activity on listed grass and broadleaf weeds, a tank mixture of Oxyfluorfen 4SC with either paraquat or glyphosate can be used when applied with ground application equipment.

DOSAGE

Oxyfluorfen 4SC is recommended for postemergence suppression at 0.5 to 1 pint (0.25 to 0.5 lb active) per broadcast acre when applied to susceptible weed seedlings less than 4 inches in height. Repeat applications may be required.

For cleanup sprays and pre harvest applications for contact (postemergence) control, apply Oxyfluorfen 4SC at 1 to 4 pints (0.5 to 2.0 lb active) per broadcast acre to susceptible weed seedlings not exceeding the 4-inch stage. Applications to weed seedlings beyond the 4-inch stage may result in partial control.

For residual (preemergence) control of susceptible weeds, use 2.5 to 4 pints (1.25 to 2.0 lb active) per broadcast acre.

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WEEDS SUPPRESSED AND/OR CONTROLLED

CHEESEWEED (MALVA)	MORNINGGLORY SPECIES, ANNUAL
FIDDLENECK, COAST	MUSTARD, BLACK
FILAREE, BROADLEAF	NETTLE, BURNING
FILAREE, REDSTEM	PIGWEEED, REDROOT
FILAREE, WHITESTEM	PURSLANE, COMMON
GROUNDSEL, COMMON	REDMAIDS
HENBIT	ROCKET, LONDON
MINERSLETTUCE	SOWTHISTLE, ANNUAL

TANK MIXTURES WITH Oxyfluorfen 4SC

IMPORTANT: Read and observe all label directions before using. When tank mixing, read and carefully follow all applicable use directions, precautions, and limitations on the respective product labels. In interpreting all labels for the tank mixture, the most restrictive label limitations must apply.

DOSAGE

For enhanced postemergence activity on a broader spectrum of grass and broadleaf weeds in the tree row middles, a tank mixture of Oxyfluorfen 4SC with either paraquat or glyphosate can be used. Apply at the recommended rates and growth stages to susceptible weed species in a manner described on the respective label.

WEEDS SUPPRESSED AND/OR CONTROLLED

BARNYARDGRASS	HORSEWEED (MARESTAIL)
BLUEGRASS, ANNUAL	ROCKET, LONDON
CHICKWEED, COMMON	RVEGRASS, ITALIAN

METHOD OF APPLICATION

GROUND APPLICATION: Apply a minimum spray volume of 20 gallons of water per acre (minimum 10 gallons for Oxyfluorfen 4SC/glyphosate tank mix). 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 may be desired. Spray equipment should be calibrated carefully before each use.

CHEMIGATION APPLICATION: Apply this product only through flood (basin) irrigation systems, or low-volume sprinkler (micro sprinkler) and drip (trickle) irrigation systems designed to distribute irrigation water beneath the tree canopy. For flood (basin) irrigation systems, Oxyfluorfen 4SC should be continuously metered into the water during the entire irrigation period. Agitation in the pesticide supply tank is suggested. Best weed control results are obtained when a uniform distribution and flow of irrigation water is maintained over level land. Oxyfluorfen 4SC may be applied through low-volume sprinkler (micro sprinkler) and drip (trickle) irrigation systems designed to distribute irrigation water beneath the tree canopy. The application of Oxyfluorfen 4SC is intended to supplement the preemergence weed control requirements of a broadcast (or directed) weed control program where weed emergence is anticipated within the wetted area of a low-volume sprinkler (micro sprinkler) or drip (trickle) irrigation system. Applications should be made prior to weed emergence since postemergence activity will be inconsistent due to partial coverage. Meter Oxyfluorfen 4SC at a continuous rate during the middle 1/3 of the irrigation period to allow for uniform distribution to the soil surface. For best results, Oxyfluorfen 4SC should be uniformly positioned across the wetted area to help reduce the "ring effect" of weed escapes, as other products begin to break down

around the emitter. Continue irrigation during the final 1/3 of the irrigation period to insure proper flushing of the irrigation system. Irrigation water treated with Oxyfluorfen 4SC must be contained on the treated area until the water is absorbed by the soil. Do not apply when wind speed favor drift beyond the area intended for treatment.

CULTURAL CONSIDERATIONS FOR ALL APPLICATIONS: In order to provide maximum effectiveness of preemergence activity of Oxyfluorfen 4SC, the berm or soil surface should be level, smooth and free of crop or weed trash (decaying leaves, clippings, dead weeds, etc.). Leaves and trash may be removed by blowing the area to be treated or by thoroughly mixing trash into the soil through cultivation prior to herbicide application.

Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of Oxyfluorfen 4SC. Cutting water furrow or cultivation that mixes 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.

PISTACHIOS, WALNUTS, ALMONDS

**NON-DORMANT APPLICATION
SPECIFIC USE RESTRICTIONS**

In addition to the following, also observe GENERAL USE RESTRICTIONS listed at the beginning of this label.

When applied as a non-dormant treatment, Oxyfluorfen 4SC can only be applied to pistachio plantings between May and 7 days prior to harvest.

When applied as a non-dormant treatment, Oxyfluorfen 4SC 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 Oxyfluorfen 4SC within 7 days of harvest of pistachios. Do not apply Oxyfluorfen 4SC within 30 days of harvest of almonds. Do not apply Oxyfluorfen 4SC within 7 days of harvest of walnuts. Do not apply more than 4 pints (2.0 lb active ingredient) of Oxyfluorfen 4SC per broadcast acre during the non-dormant season. Oxyfluorfen 4SC should be applied only to healthy growing trees. Direct spray toward the base of trees. Avoid direct contact with foliage or nuts.

WINDBREAKS AND SHELTERBELTS

**FOR USE ONLY IN MINNESOTA, NORTH DAKOTA,
SOUTH DAKOTA AND WYOMING**

GENERAL INFORMATION

Oxyfluorfen 4SC is effective as a preemergence and/or postemergence herbicide for the control of listed annual broadleaf weeds in windbreaks and shelterbelts. Preemergence control is most effective when spray is applied to clean, weed-free soil surfaces. Treated soil surfaces should not be disturbed because the herbicidal effectiveness of Oxyfluorfen 4SC may be decreased. Seedling weeds are controlled during emergence as they come in contact with the soil-applied herbicide. The most effective postemergence weed control is achieved when Oxyfluorfen 4SC is applied with thorough coverage of weeds in the seedling stage.

Occasionally after the use of Oxyfluorfen 4SC, a spotting, crinkling or flecking may appear on the leaves of deciduous species. Leaves that receive direct or indirect (drift) spray contact will be injured. Deciduous species typically outgrow this condition rapidly and develop normally.

IMPORTANT: Some varieties or cultivars of conifers and deciduous species listed may be susceptible to Oxyfluorfen 4SC. Care should be taken to ensure that the particular variety to be sprayed with Oxyfluorfen 4SC is tolerant. It is suggested that unfamiliar species be tested in limited areas prior to application for preemergence and postemergence weed control.

WEEDS CONTROLLED

When Oxyfluorfen 4SC is applied preemergence or postemergence (up to 4-leaf weed stage) at recommended dosages, the following broadleaf weeds are 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 |
| HENBIT | FLOWER |
| JIMSONWEED | PIGWEEED, PROSTRATE |
| KNOTWEED, PROSTRATE | PIGWEEED, REDROOT |
| KOCHIA | PURSLANE, COMMON |
| LADYSTHUMB | ROCKET, LONDON |
| LAMBSQUARTERS, COMMON | *SHEPHERDSPURSE |
| LETTUCE, PRICKLY | SMARTWEED, PENNSYLVANIA |
| MALLOW, LITTLE | SOWTHISTLE, ANNUAL |
| MAYWEED | TANSYMUSTARD |
| MUSTARD, BLUE | THISTLE, RUSSIAN (seedling) |
| MUSTARD, TUMBLE | VELVETLEAF |

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

GRASSES CONTROLLED

When Oxyfluorfen 4SC is applied preemergence or postemergence (up to 2-leaf stage) at recommended dosages, the following annual grasses are controlled/suppressed:

- | | |
|-------------------|----------------|
| BARNYARDGRASS | FOXTAIL, GIANT |
| BLUEGRASS, ANNUAL | GOOSEGRASS |
| CRABGRASS, LARGE | WITCHGRASS |

Oxyfluorfen 4SC is most effective when applied preemergence to annual grasses. Postemergence applications should be made to seedling grasses not exceeding the 2-leaf stage. The addition of 0.25% (2 pints per 100 gallons of spray solution) of an 80% active nonionic surfactant, cleared for application to growing crops, enhances herbicidal activity on emerged weeds. When determining an appropriate use rate where a range of rates is provided, use higher rates where heavy weed pressure is anticipated, or where medium and fine soil textures exist and high organic matter soils are present.

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Oxyfluorfen 4SC 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	<i>Tsuga canadensis</i>
WESTERN HEMLOCK	<i>Tsuga heterophylla</i>
PINE	
AUSTRIAN	<i>Pinus nigra</i>
EASTERN WHITE	<i>Pinus strobus</i>
JACK HIMALAYAN	<i>Pinus banksiana</i>
LOBLOLLY	<i>Pinus graiffithii</i>
LOGSPOLE	<i>Pinus taeda</i>
LONGLEAF	<i>Pinus contorta</i>
MONTEREY	<i>Pinus palustris</i>
MUGO	<i>Pinus radiata</i>
PONDEROSA	<i>Pinus mugo</i>
SCOTCH	<i>Pinus ponderosa</i>
SHORTLEAF	<i>Pinus sylvestris</i>
SLASH	<i>Pinus echinata</i>
VIRGINIA	<i>Pinus elliotii</i>
	<i>Pinus virginiana</i>
SPRUCE	
BLUE	<i>Picea pungens</i>
DWARF ALBERTA	<i>Picea glauca conica</i>
NORWAY	<i>Picea abies</i>
SITKA	<i>Picea sitchensis</i>
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 scopulorum</i>
RED CEDAR	
	<i>Juniperus virginiana</i>
YEW	
	<i>Taxus spp.</i>
DECIDUOUS HARDWOOD SPECIES	
ASH	<i>Fraxinus spp.</i>
CRABAPPLE	<i>Malus spp.</i>
EUCALYPTUS	<i>Eucalyptus viminalis</i> , <i>E. pulverulenta</i> , <i>E. camaldulensis</i>
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 spp.</i>
SWEETGUM	<i>Liquidambar styraciflua</i>
SYCAMORE	<i>Platanus occidentalis</i>
WALNUT, BLACK	<i>Juglans nigra</i>

DOSAGE

Apply 2 to 4 pints (1.0 to 2.0 lb active ingredient) of Oxyfluorfen 4SC per broadcast acre for preemergence or postemergence weed control. The addition of 0.25% v/v (2 pints/100 gallons of spray solution) of an 80% active non ionic surfactant cleared for application on growing crops will enhance the herbicidal activity of Oxyfluorfen 4SC on emerged weeds.

For banded application, the amount of Oxyfluorfen 4SC recommended per acre for broadcast application may be reduced according to the following formula:

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

METHOD OF APPLICATION

CONIFERS: Oxyfluorfen 4SC can be applied pre-transplant, post-directed or postemergence (over the top) to conifers. Postemergence or post-directed applications should be applied prior to budbreak or after the foliage has had an opportunity to harden off.

DECIDUOUS HARDWOODS: Oxyfluorfen 4SC has exhibited selectivity to many deciduous species when applied pre-transplant or as a postdirected spray prior to budbreak. Special care should be taken to direct the spray toward the base of the plant. Applications made after budbreak may result in injury to the deciduous species, and are not recommended. (Note: If a non-dormant application is required, do not apply during periods of new foliage growth. Applications should be made after foliage has fully expanded and hardened off. Direct the spray toward the base of the trees. Avoid direct or indirect spray contact with the foliage of the deciduous species.)

Oxyfluorfen 4SC should be thoroughly mixed with clean water at the recommended rate and applied at 20 to 40 psi in a minimum of 20 gallons of water per acre as a broadcast, banded or post-directed spray. Thorough spray coverage is essential to maximize the postemergence activity of Oxyfluorfen 4SC. Spray equipment should be calibrated carefully before each use.

Pre-transplant applications must be made after completion of soil preparation but prior to transplanting. Transplanting should be completed with minimal soil disturbance. Treated soil surfaces should be left undisturbed after transplanting to obtain the greatest benefit of Oxyfluorfen 4SC on susceptible annual broadleaf weeds during the time period for which weed control is desired. However, timely cultivations after weed emergence will assist in weed control.

**WINDBREAKS AND SHELTERBELTS
SPECIFIC USE RESTRICTIONS**

The following use restrictions must be observed when Oxyfluorfen 4SC is used as recommended on this label.

- Do not apply more than 4 pints (2.0 lb active ingredient) of Oxyfluorfen 4SC per treated acre per growing season as a result of single or multiple applications.
- Always apply Oxyfluorfen 4SC to healthy deciduous and/or conifer species.
- Do not apply Oxyfluorfen 4SC to conifers and deciduous 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.

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