

Starfighter L

Preemergence Herbicide for the Control of Annual Grasses and Broadleaf Weeds in Turf, Nurseries, and Ornamentals Including Landscape Ornamental Beds on Residential Properties by a Professional Applicator.

For sale to and use by Professional Applicators only. Not for sale to use by homeowner/consumers. Not for Use in Turfgrass on Residential Properties.

Active Ingredient:

Oxadiazon [2-tert-butyl-4-(2, 4-dichloro-5-isopropoxyphenyl)- Δ^2 -I, 3, 4-oxadiazolin-5-one]	34.1%
Other Ingredients	65.9%
Total:	100.0%
Contains 3.17 lbs. active ingredient per gallon.	

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID		
IF IN EYES	 Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. 	
IF ON SKIN OR CLOTHING	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. 	
IF INHALED	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible. Call a poison control center or doctor for further treatment advice. 	
IF SWALLOWED	 Call a poison control center or doctor immediately for treatment advice. Have affected person sip a glass of water if able to swallow. Do not induce vomiting unless told by a poison control center or doctor. 	
HOT LINE NUMBER		

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

may also contact 1-888-875-1724 for emergency medical treatment information.

Phoenix Environmental Care, LLC

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PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS CAUTION

Harmful if absorbed through the skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (such as Natural Rubber, Selection Category A.) Wear protective eyewear. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils; and neoprene rubber \geq 14 mils. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators and other handlers must wear: Long-sleeved shirt and long pants, shoes plus socks, and chemical resistant gloves such as barrier laminate, butyl rubber, nitrile or neoprene gloves. In addition, mixers and loaders must wear a chemical-resistant apron. See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS

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

User Safety Recommendation

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should 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.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Starfighter L should not be used in areas where irrigation or rainfall results in the direct or indirect (via ditches and canals) contamination of surface waters through dissolved runoff or erosion of soil particles to which oxadiazon is absorbed.

DIRECTIONS FOR USE

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

Read the entire label before using this product.

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. 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 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as, plants, soil, or water, is coveralls, chemical resistant gloves made of any waterproof material, and shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

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

Do not allow people or pets to enter treated areas until sprays have dried.

GENERAL INFORMATION

Starfighter L controls many annual grasses and broadleaf weeds by killing the weed seedlings on contact during weed germination. Starfighter L's preemergent herbicide activity provides weed control in established perennial turf grasses and in a broad range of woody ornamental shrubs, vines, and trees.

Uniform application of Starfighter L is essential for effective weed control. Following the manufacturer's directions, calibrate the sprayer prior to use, and check frequently during spraying to be certain that the product is being uniformly applied.

For best results, water-in product as soon as practical after application.

USE RESTRICTIONS

DO NOT apply more than 1.89 gallons Starfighter L per acre year, or more than 5.55 fl. oz of product per 1000 sq. ft. per year (rates equivalent to 6 lbs. a.i./A/year) except in areas where there is heavy weed infestation. In areas of heavy weed infestation, the maximum application rate is 2.52 gallons Starfighter L per acre per year, or 7.4 fl. oz of product per 1000 sq. ft. per year (rates equivalent to 8 lbs. a.i./A/year).

DO NOT apply more than 1.26 gallons Starfighter L per acre, or more than 3.7 fl oz of product per 1000 sq. ft. per year (rates equivalent to 4 lbs. a.i./A) in a single application.

DO NOT apply more than 0.945 gallons Starfighter L per acre to St. Augustine or Bentgrass turf (equivalent to 3 lbs. a.i./A) in a single application.

DO NOT make more than 3 applications of Starfighter L to a treated area per year.

DO NOT use Starfighter L on residential turfgrass.

DO NOT allow domestic animals to graze treated areas.

DO NOT apply Starfighter L to Bentgrass turf mowed to % inch or less.

DO NOT apply Starfighter L to newly seeded areas.

DO NOT apply to Dichondra or Centipedegrass.

DO NOT apply to putting greens or tees as the cultural practices used may be incompatible with Starfighter L use.

DO NOT seed into areas treated with Starfighter L within 4 months of the last application except as directed in the label text below.

Avoid contamination of water intended for irrigation and domestic use.

TURF

Use in dormant established Bermudagrass, St. Augustinegrass* and Zoysia turf in non-residential settings such as golf course fairways, lawns, and parks for control of Crabgrass, Goosegrass, Annual Bluegrass, Annual Sedge and Virginia Buttonweed.

To ensure an accurate and effective application of Starfighter L, calculate the turf area to be treated, mow and rake area free of leaves and cuttings, if necessary to allow the spray access to the soil surface, and spray the requisite amount uniformly over the treatment area. Irrigate turf after application if rainfall is not imminent. Make application at least 2-3 weeks prior to green-up.

DO NOT USE ON ST. AUGUSTINE GRASS OR ZOYSIA TURF IN CALIFORNIA.

Newly Sprigged Zoysia (Hawaii only): Apply Starfighter L to Zoysiagrass being grown for sod after sprigging. Sprays of Starfighter L must reach the soil surface to be effective; irrigate turf after application if rainfall is not imminent.

PREEMERGENCE WEED CONTROL

WEEDS CONTROLLED	Starfighter L FL OZ PER 1000 sq. ft.	DIRECTIONS
Crabgrass (Digitaria spp.) Goosegrass (Eleusine indica) Annual Bluegrass (Poa annua)* Annual Sedge (Cyperus compressus)*	1.85-2.8	Make application in late winter or early spring before weed seed germination and spring greenup begin. Application made after weed germination has begun will not be optimal. Application at this time will control spring germinating <i>Poa annua</i> only. Allow 4 months between initial application and retreatment.
Virginia Buttonweed (Diodia virginiana)	2.8	Apply in 0.75 – 3.5 gallons of water 1000 sq. ft.

^{*}Not registered for use in California.

ANNUAL WEED CONTROL DURING BERMUDAGRASS ESTABLISHMENT FROM SPRIGS

WEEDS CONTROLLED	Starfighter L FL OZ PER 1000 sq. ft.	DIRECTIONS
Crabgrass, Goosegrass, and Annual Sedge	1.85	Use 0.75 - 3.5 gallons of water per 1000 sq. ft treated.
		Leave soil surface undisturbed post application to maximize the effectiveness of the herbicide barrier.
		Irrigation or rainfall immediately after application will give optimal results.

^{*}Not registered for use in California.

ORNAMENTALS AND CONIFER NURSERIES

WOODY ORNAMENTAL SHRUBS AND TREES, CONIFER NURSERY AND ORNAMENTALS ON RESIDENTIAL PROPERTIES: For use by professional applicators only.

Starfighter L provides annual grass and broadleaf weed control when applied before weed seed germination begins. It can be applied to established and newly transplanted ornamentals in any season, but do not apply during bud break or in the four weeks following bud break. Ornamentals and groundcovers listed on this label as tolerant to Starfighter L may be sprayed over the top, otherwise direct the spray to the soil surface and avoid product contact with the foliage of desirable plants.

Starfighter L establishes an effective herbicide barrier upon watering into the soil. Subsequent disturbance of the soil by mixing or cultivation will disrupt this barrier and reduce the product's effectiveness. Watering in the form of rainfall or overhead irrigation is necessary after over the top application in order to move Starfighter L off of the foliage and onto the soil surface. Failing to irrigate within 2 hours of application may result in plant injury.

Do not apply in greenhouses as volatilization of Starfighter L's active ingredient onto leaf surfaces may result in plant injury.

Ground Application – To ensure an accurate and effective application of Starfighter L, calculate the area of each bed to be treated, remove any existing weed growth, and then apply Starfighter L into the ornamental beds at 1.85 to 4 2.8 fl oz per 1,000 square feet. Make up the spray in a minimum volume of 1 gallon per 1000 square feet. See notes listed at the end of the weed listings below for species specific rate adjustments and use restrictions.

Make no more than 3 applications per year and allow a minimum of 4 months between applications.

ORNAMENTALS ON RESIDENTIAL PROPERTIES (For use by professional applicator only and not for use in turfgrass on residential properties): On residential properties Starfighter L may be applied to non turfgrass containing landscape beds. These are outdoor plantings comprising groundcovers, shrubs, trees, and flowers in monoculture or in mixed stands.

For residential properties, do not allow unprotected persons or pets to enter the treated areas until the Starfighter L is watered-in and the soil surface has dried.

WOODY ORNAMENTAL SHRUBS AND TREES, CONIFER NURSERIES, AND ORNAMENTALS ON COMMERCIAL PROPERTIES:

Starfighter L provides annual grass and broadleaf weed control when applied before weed seed germination begins. It can be applied to established and newly transplanted ornamentals in any season, but do not apply during bud break or in the four weeks following bud break. Ornamentals and groundcovers listed on this label as tolerant to Starfighter L may be sprayed over the top, otherwise direct the spray to the soil surface and avoid product contact with the foliage of desirable plants.

Starfighter L establishes an effective herbicide barrier upon watering into the soil. Subsequent disturbance of the soil by mixing or cultivation will disrupt this barrier and reduce the product's effectiveness. Watering in the form of rainfall or overhead irrigation is necessary after over the top application in order to move Starfighter L off of the foliage and onto the soil surface. Failure to irrigate within 2 hours of application may result in plant injury.

Do not apply in greenhouses as volatilization of Starfighter L's active ingredient onto leaf surfaces may result in plant injury.

Ground Application – To ensure an accurate and effective application of Starfighter L, calculate the area of each bed to be treated, remove any existing weed growth, and then apply Starfighter L into the ornamental beds at 1.85 to 4 2.8 fl oz per 1,000 square feet. Make up the spray in a minimum volume of 1 gallon per 1000 square feet. See notes listed at the end of the weed listings below for species specific rate adjustments and use restrictions.

Make no more than 3 applications per year and allow a minimum of 4 months between applications.

^{*} Use 2.8 fl oz per 1000 sq. ft.

PLANT TOLERANCE: Starfighter L may be used at label recommended rates and dilutions as an over the top spray in the following ornamentals only. For all other woody ornamental plants, apply Starfighter L as a spray directed to the soil surface, avoiding contact with foliage of desirable species.

Tolerant Ornamental Plant Species

Andorra Juniper	Common Juniper	Gladiolas	Nootka Spound Cypress
Arborvitae	Cranberry	Grand Fir*	Oleander
Baby's Breath	Creeping Juniper	Hinoki Cypress	Ophiopogon
Blue Rug Juniper	Douglas Fir*	Japanese Barberry	Purple Hopseed Bush
Blue Spruce*	Eastern Red Cedar	Japanese Holly	Raphiolepis
Boxwood	Eastern White Pine	Kurogane Holly	Sawara Cypress
Canadian Hemlock*	Evergreen Euonymus	Mugho Pine	Scotch Pine
Chinese Holly	Fraser Fir*	Noble Fir*	Statice

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Always consult your local Extension agent or State Agricultural Specialist for specific information regarding local weed infestation and lowest effective dosage rates.

LANDSCAPE PLANTINGS: COMMERCIAL, ROADSIDE, & INDUSTRIAL SITES:

Apply Starfighter L prior to as an over-the-top spray only on labeled ornamentals weed seed germination.

AMOUNT TO USE: To ensure an accurate and effective application of Starfighter L, calculate the area of each planting to be treated, remove any existing weed growth, and then apply Starfighter L into the planting at 1.85 fl oz per 1000 sq. ft. Do not use drift control agents or any other adjuvants. Failure to irrigate within 2 hours of application may result in plant injury.

CROP TOLERANCE: The plants listed in the table below may be treated with Starfighter L in an over the top spray.

Tolerant Plant Species

Large Leaf Ice Plant African Trailing Daisy
English Ivy Common Periwinkle
Algerian Ivy Bigleaf Periwinkle

TANK-MIX COMBINATIONS: Ornamental Plantings and Non-cropland Areas

Use a tank mix of Starfighter L plus Avocet or Avocet PLX to control existing weeds and to prevent emergence of weeds from seed. Weeds listed on the respective labels will be controlled by this herbicide combination.

When making any tank mixes a compatibility test must be performed to insure that the tank mix partners are compatible under the conditions of application.

Fill a clean, wide-mouth quart jar ¾ full with the diluent water. Add 1.2 fl oz Starfighter L the jar. shake well, then add proportional amounts of the other intended ingredients in the following order dry flowables, wettable powders, liquid flowables, soluble concentrates, emulsifiable concentrates, and surfactants or compatibility agents; shaking well after each addition. Bring the final volume to 1 qt after the last product has been added and shake well. The final mixture should be uniform and smooth with no evidence of coagulation, precipitation, gelling, or separation. If incompatibility is evident, begin test again with a compatibility agent added first. If this does not smooth the mixture, try higher concentration or other compatibility agents. Dilution of the products with equal parts of water before adding to jar may improve the mixture.

When tank-mixing with other products, Starfighter L should be the first product added to the spray tank. With the agitation on add Starfighter L to the tank. Allow at least five minutes for the products to disperse completely before adding other ingredients. Continue agitating while adding other products in the order given for the jar test. Add remainder of water addition of products is complete.

[†] Not registered for use in California.

PRECAUTION: Do not allow solutions containing non selective herbicides such a Avocet/Avocet PLX solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product is greatest when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow spray drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in splatter of fine particles (mist) which are likely to drift.

BROADCAST APPLICATION RATES:

Starfighter L/Avocet®				
Existing Annual and Broadleaf Weeds	Starfighter L Fluid Ounces Per 1000 sq. ft.	Avocet [®] /Avocet PLX Fluid Ounces Per 1000 sq. ft.		
Less than 6" tall	1.85-2.8	1-10		
Greater than 6" tall	1.85-2.8	1-10		
Existing Perennial	1.85-2.8	1-10.4		

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

Do not store in or around the home.

PESTICIDE DISPOSAL

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

CONTAINER DISPOSAL

Empty containers should be triple rinsed (or equivalent), then offered for recycling or reconditioning; or puncture and disposed of in a sanitary landfill, or by incineration; or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Phoenix Environmental Care, LLC or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Phoenix Environmental Care, LLC and Seller harmless for any claims relating to such factors.

Phoenix Environmental Care, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Phoenix Environmental Care, LLC and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, Phoenix Environmental Care, LLC MAKES NEITHER WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To extent consistent with applicable law, neither Phoenix Environmental Care, LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF PHOENIX ENVIRONMENTAL CARE, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF PHOENIX ENVIRONMENTAL CARE, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Phoenix Environmental Care, LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitations of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Phoenix Environmental Care, LLC

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