



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

May 7, 2024

Ed Carmody
President
Regal Chemical Company
600 Branch Drive
Alpharetta, GA 30004

Subject: Label Amendment - Registration Review Mitigation for Oxadiazon
Product Name: REGAL O-O HERBICIDE
EPA Registration Number: 48234-10
Application Dates: 06/30/2022
Decision Numbers: 585584

Dear Ed Carmody:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Oxadiazon Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable. As part of the registration review, EPA identified the need for this product to be classified as Restricted Use. The labeling approved today incorporates the necessary changes for classification as Restricted Use, therefore the classification is effective on the date of this letter.

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

registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. Due to the classification of this product as Restricted Use, in accordance with 40 CFR 152.167, after 120 days, any of this product you sell or distribute must:

- 1) Bear an approved amended label containing the terms of the Restricted Use classification;
- 2) Bear a sticker containing the product name, EPA registration number, and any terms of restricted use; **or**
- 3) Be accompanied by supplemental labeling bearing the product name, EPA registration numbers, and any terms of restricted use.

After 270 days, any of this product you sell or distribute must bear the approved amended labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Kelsi Grogan by phone at (202)566-2228, or via email at grogan.kelsi@epa.gov.

Sincerely,



Kevin Costello, Branch Chief
Risk Management and Implementation Branch 2
Pesticide Re-Evaluation Division
Office of Pesticide Programs

ENCLOSURE: Stamped label

RESTRICTED USE PESTICIDE

Due To Potential Human Health Risks Of Concern (Cancer) From Chronic Dietary Or Dermal Exposure When Used In Accordance With Label Directions.

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

Regal O-O Herbicide®

For sale to and use by professional applicators only. Not for sale to or use by homeowners/consumers.

For pre-emergent control of weeds in commercial nurseries and ornamental landscapes. Especially suited for use in container, field grown and landscape ornamentals, and foliage crops.

OXYFLUORFEN	GROUP	14	HERBICIDE
OXADIAZON	GROUP	14	HERBICIDE

ACTIVE INGREDIENTS:

Oxyfluorfen: 2-chloro-1- (3-ethoxy-4-nitrophenoxy)-
4-(trifluoromethyl) benzene 2.0%
Oxadiazon: 2-tert-butyl-4- (2,4-dichloro-5-isopropoxyphenyl)-
delta2-1, 3,4-oxadiazolin-5-one 1.0%

OTHER INGREDIENTS:..... 97.0%
TOTAL 100.0%

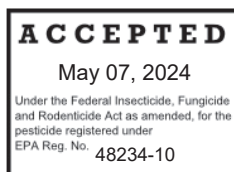
KEEP OUT OF REACH OF CHILDREN CAUTION

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

FIRST AID	
If on skin or clothing:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
If in eyes:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
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 1-800-621-5208 for emergency medical treatment information.	

EPA REG. NO. 48234-10

EPA EST. NO. 48234-GA-1



Regal Chemical Company
Alpharetta, GA 30004
Net. Weight 50 Pounds

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

Harmful if absorbed through skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Loaders, applicators, and other handlers must wear:

- Coveralls worn over short-sleeved shirt and short pants
- Waterproof gloves
- Chemical resistant footwear plus socks
- Protective eye wear
- Chemical resistant headgear for overhead exposure
- Long sleeved shirt and long pants

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.

USER SAFETY RECOMMENDATIONS:

- 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.

ENGINEERING CONTROLS:

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

ENVIRONMENTAL HAZARDS

For terrestrial uses: 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 disposing of equipment wash water or rinsate. Runoff may be hazardous to aquatic organisms in water adjacent to treated areas. This pesticide is toxic to oysters and shrimp.

This chemical has properties and characteristics associated with chemical detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow. This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of oxadiazon from runoff water and sediment.

NON-TARGET ORGANISM ADVISORY: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize drift.

DIRECTIONS FOR USE:

RESTRICTED USE PESTICIDE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read 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. After application, user must thoroughly irrigate the site as soon as possible on the same day of application.

WEED RESISTANCE MANAGEMENT

For resistance management for Regal Ronstar Plus is a Group 14 herbicide. Any weed population may contain or develop plants naturally resistant to Regal Ronstar Plus and other Group 14 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance- management strategies should be followed.

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

- Rotate the use of Regal Ronstar Plus or other Group 14 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development.
- Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species.
- If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- Report any incidence of local non-performance of this product against a particular weed species to your Regal 0-0 Herbicide representative at (800) 621-5208 [and/or at <https://www.regalchem.com>].

BEST MANAGEMENT PRACTICES

- To the extent possible, use a diversified approach toward weed management. Whenever possible incorporate multiple weed-control practices such as mechanical cultivation, biological management practices, and crop rotation.
- Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.
- To the extent possible do not allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and post-harvest to prevent a buildup of the weed seed-bank.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). The REI is 24 hours for all crops except for the following:

- Conifer seedlings: The REI is three days.
- Conifer trees: The REI is six days.

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
- Waterproof gloves
- 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 for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter the treated area until dusts have settled. If soil incorporation is required after the application, do not enter or allow others to enter the treated area (except those persons involved in the incorporation) until the incorporation is complete. If the incorporation is accomplished by watering-in, do not enter or allow others to enter the treated area until the surface is dry after the watering-in.

DIRECTIONS FOR USE:

For all use sites:

“The minimum retreatment interval (RTI) between applications is 60 days.”

“Total applications of oxadiazon of all physical forms must not exceed 6.0 lbs a.i./A/year if this product is used on the same site with liquid formulations.”

For oxadiazon use on turf:

“A maximum single application rate of 3.0 lbs a.i./A, and a maximum annual application rate of 6.0 lbs a.i./A.”

“For applications on non-agricultural turf (e.g., golf courses, parks, athletic fields) that follow a liquid application, [product] must be applied 60 days or later after the liquid application. After applying this product, no liquid applications of oxadiazon are allowed within the same calendar year on the same area of turf.”

“For applications to non-agricultural turf (e.g., golf courses, parks, athletic fields), this product may not be applied prior to any liquid applications of oxadiazon within the same calendar year on the same area of turf.”

“On golf course turf only: In areas of heavy weed infestation only, the maximum single application rate is 4.0 pounds of active ingredient per acre, and the maximum annual application rate is 8.0 pounds of active ingredient per acre. No liquid applications may be applied on areas of turf treated at this maximum application rate in the same year.”

“On golf course turf only: total applications of oxadiazon of all physical forms are limited to 30% of the total managed turf area of a golf course per year. Applications may be made to any turf surface type, including fairways, tees, greens, roughs, non-playable turf surfaces, or other managed turf areas. This 30% limit may be applied to the same or different turf areas from year to year.”

“On golf course turf and sod farms: a minimum 10-foot-wide untreated vegetative buffer must be maintained between the treated area and any surface water features.”

For ornamental landscaping, trees, shrubs, and nurseries:

“A maximum single application rate of 3.0 lbs a.i./A, and a maximum annual application rate of 6.0 lbs a.i./A.”

For use on container and field grown ornamentals. Regal O-O Herbicide has been thoroughly researched; however, testing has not been conducted on all species or cultivars, or under all growing conditions. In some instances, efficacy may vary.

This herbicide is a pre-emergent product, so it should be applied at recommended rate, prior to susceptible weed seed germination, with a suitable spreader which will assure accurate even particle distribution. Do not disturb soil surface once the product has been applied, as uniform placement is disrupted, and herbicide effectiveness is thereby reduced. Applications should be made to weed free surfaces. Do not apply herbicide granules to wet foliage as phytotoxicity can result. After application, user must thoroughly irrigate the site as soon as possible on the same day of application.

Apply 2.3 lbs of product per 1000 sq. ft., or 100 lbs per acre. For continued weed control, repeat applications are recommended at 3-4 month intervals.

Container grown ornamentals:

DO NOT apply more than three applications of 100 Lbs. of product per acre per season (total of 3 lbs of oxadiazon and 6 lbs of oxyfluorfen per acre per year).

Conifer Seedlings:

DO NOT apply more than 100 Lbs. per acre per season (total of 1 lbs of oxadiazon and 2 lbs of oxyfluorfen).

Regal O-O Herbicide has shown excellent results when used on the following:

Container &/or Field Grown (General)

Abelia	*Euonymus	Pittosporum
Acacia	Forsythia	*Potentilla
Acer	Gardenia	Prunus
Araucaria	*Hydrangea	Pyracantha
*Azalea (Rhododendron)	Hypericum	Quercus
Berberis	*Ilex	Rhaphiolepis
Betula	Jasminum	*Rhododendron
Buxus	Juniperus	Santolina
Callistemon	Ligustrum	Schefflera
Camellia	Lonicera	Spiraea
Cercis	Magnolia	Syringa
Chamaecyparis	Mahonia	Taxus
Chamaedorea	Nerium	Thuja
Cornus	Pachysandra	Viburnum
Cotoneaster	Photinia	Weigela
Cupressus	Picea	Xylosma
Cytisus	Pieris	
Escallonia	Pinus	

***Certain species of these genera may be sensitive to this herbicide. Use test plots to determine sensitive cultivars, if not known.**

Pre-emergence control of the following weeds has been demonstrated when using Regal O-O Herbicide at recommended rate, timing and proper techniques and conditions. Many other weed species may also be controlled.

Weed grasses:

Annual bluegrass	(Poa annua)
Barnyardgrass	(Echinochloa crusgalli)
Crabgrass	(Digitaria sanguinalis)
Goosegrass	(Eleusine indica)
Sprangletop	(Leptochloa uninervia)

Broadleaf Weeds:

Bittercress	(Cardamine pensylvanica)
Common Chickweed	(Stellaria media)
Cudweed	(Gnaphalium obtusifolium)
Dandelion	(Taraxacum officinale)
Fireweed	(Epilobium angustifolium)
Fleabane	(Erigeron strigosus)
Groundsel	(Senecio vulgaris)
Horseweed	(Conyza canadensis)
Oxalis	(Oxalis stricta)
Pearlwort	(Segina procumbens)
Pepperweed	(Lepidium virginicum)
Pigweed	(Amaranthus retroflexus)
Shepherdspurse	(capsella burse-pastoris)
Sowthistle	(Sonchus arvensis)
Spurge, Garden	(Euphorbia hirta)
Spurge, Prostrate	(Euphorbia humistrata)
Spurge, Spotted	(Euphorbia maculata)

PRECAUTIONS AND LIMITATIONS

Do Not apply to wet or moist foliage.

Do Not apply to plant types whose leaves funnel the herbicide granules to the leaf base, for removal of granules is difficult and can result in foliage injury.

Do Not apply in wind conditions that will affect product distribution. Uneven distribution will result in erratic weed control.

Do Not apply over plants that are producing flush new growth. Tender, new leaves are especially sensitive, and injury may result.

Do Not use on any varieties or cultivars unless user is familiar with the results on specific plant materials under his growing conditions.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a clean, dry place.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide is a violation of Federal Law. Wastes of Regal O-O Herbicide should be disposed of by use according to label instructions. If needed, contact local Environmental Control Agency, or Hazardous Waste representatives for recommendations.

CONTAINER DISPOSAL: Completely empty bag contents into application equipment. Dispose of empty bag in a sanitary landfill or by incineration, or, if permitted by local and state authorities, by burning. If burned, stay out of smoke.

NOTICE TO USER

Plant tolerance to O-O Herbicide has been found to be acceptable on all ornamentals that it has been tested on. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for tolerance to O-O Herbicide. Neither the manufacturer nor seller has determined whether or not O-O Herbicide can be used safely on ornamental plants not specified on this label. The professional user should determine if O-O Herbicide can be used safely prior to commercial use. In a small area test the recommended rates on a small number of plants for phytotoxicity prior to widespread use.

NOTICE OF WARRANTY

NO WARRANTY OR REPRESENTATION IS MADE, EXPRESS, OR IMPLIED, CONCERNING THE RESULTS OBTAINED FROM THE USE OF THIS PRODUCT IF NOT USED IN ACCORDANCE WITH DIRECTIONS OR ESTABLISHED SAFE PRACTICE. To the extent consistent with applicable law, the exclusive remedy of the user or Buyer, and the limit of liability of Regal Chemical Company or any other Seller, for any and all losses, injuries or damages resulting from the use of handling of this product shall be the purchase price paid by the user or Buyer for the quantity of this product involved. The Buyer and all users are deemed to have accepted the terms of this Notice, which may be varied only by agreement in writing, signed by a duly authorized representative of Regal Chemical Company.