



## OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

June 28, 2024

Nancy Huebl  
Sr. Registration Specialist  
Central Garden & Pet Company  
1501 East Woodfield Rd 200W  
Schaumburg, IL 60173

Subject: Approval of Label Amendment; Only Indicated Changes Reviewed – Addition of tick claim already approved in Directions For Use  
Product Name: RF2301 LPD PO  
EPA Registration Number: 89459-127  
Application Date: May 28, 2024  
Case Number: 613776

Dear Nancy Huebl:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. However, EPA reviewed only the label changes highlighted, marked, or otherwise indicated on the submitted label. Any other changes to the previously approved label that were not clearly highlighted, marked, or otherwise indicated in your submission were not reviewed and may form the basis of regulatory and/or enforcement action if later discovered by the Agency. Further, submission of a label amendment application with unidentified changes may be considered a knowing submission of false information to the Agency. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

The label submitted with the application has been stamped "Accepted Only Indicated Revisions Reviewed" and is enclosed for your records.

This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 C.F.R. § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 C.F.R. § 152.3.

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 FIFRA and is subject to review by the Agency. If the website contains any false or misleading statement, design, or graphic, the product may be misbranded and unlawful to sell or distribute under FIFRA Sections 2(q)(1)(A) and 12(a)(1)(E). 40 C.F.R. § 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on the product label, claims made as part of the product's sale or distribution may not substantially differ from those claims approved through the registration process under FIFRA Section 12(a)(1)(B). 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 product will be referred to the EPA's Office of Enforcement and Compliance Assurance.

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

If you have any questions, please contact David Gardner at (202) 566-2677 or at [gardner.david@epa.gov](mailto:gardner.david@epa.gov).

Sincerely,

A handwritten signature in cursive script that reads "Tamica Cain".

Tamica Cain, Product Manager 10  
Invertebrate & Vertebrate Branch 2  
Registration Division (7505T)

Enclosure

**Note to reviewer: Brackets [ ] denote optional language. The final label may include some or all of the optional text.**

<b>DIFLUBENZURON</b>	<b>GROUP</b>	<b>15 3A</b>	<b>INSECTICIDE</b>
<b>LAMBDA-CYHALOTHRIN</b>			

## RF2301 LPD PO

**ACCEPTED**

ONLY INDICATED

REVISIONS REVIEWED

06/28/2024

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

89459-127

No label revisions other than those indicated were  
reported to the Agency.

**Alternate brand name: Starbar® Inhibidor™ Insecticidal Pour-On**

Insecticide For Beef Cattle

Ready-To-Use as a Pour-On

Combination of an insect growth regulator, adulticide and synergist

Provides control of chewing and sucking lice

Prevents louse eggs [(nits)] from hatching

Kill louse eggs [(nits)] before they hatch

One Application controls lice

Season long Control of Lice [(JAN-APR)]

Kills horn flies, horse flies and deer flies

Kills horn, horse and deer flies on beef cattle and calves

Kills chewing and sucking lice, horn flies, stable flies, horse and deer flies on beef cattle and calves

Kills horn flies for up to 7 days [when applied as a pour-on]

Kills horn flies for up to 17 days when applied as a pour-on

Kills stable flies for up to 10 days [when applied as a pour-on]

Kills stable flies for up to 10 days when applied as a pour-on

**Kills ticks by direct spray dilution application**

Prevents the emergence of horn flies in the manure [(of)(from)] treated cattle

For Use as: Pour On or Spray

For Use on: Beef Cattle and calves

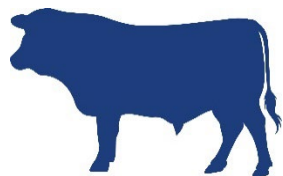
Treats 64 Cattle (1,000 lbs. per animal) [For 1/2 Gallon Size Packaging Only]

Treats 128 Cattle (1,000 lbs. per animal) [For 1 Gallon Size Packaging Only]

Treats 320 Cattle (1,000 lbs. per animal) [For 2.5 Gallon Size Packaging Only]

[POUR ON] – [SPRAY]

**Graphic icons for optional use on label**



**Beef cattle**



**Neogen (subregistrant) company icon**



**ACTIVE INGREDIENTS:**

Diflubenzuron .....	3.0%
Piperonyl Butoxide* .....	2.5%
Lambda-cyhalothrin .....	0.5%

<b>OTHER INGREDIENTS**:</b> .....	<u>94.0%</u>
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<b>TOTAL</b>	<b>100.0%</b>
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\*(butylcarbityl)(6-propylpiperonyl) ether and related compounds

\*\*Contains petroleum distillates

This product contains 0.222 lb. diflubenzuron, 0.185 lb. piperonyl butoxide and 0.037 lb. lambda-cyhalothrin per gallon of formulated product.

**KEEP OUT OF REACH OF CHILDREN**

See inside label booklet for additional Precautionary Statements and First Aid

EPA Reg. No. 89459-127

EPA Est. No.

Net Contents:

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

Contains Petroleum distillate. Harmful if swallowed. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

FIRST AID	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Immediately call a poison control center or doctor for treatment advice.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give <b>any</b> liquid to the person.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For additional information on this pesticide product (including health concerns, medical emergencies or pesticide incidents) you may call Central Garden & Pet Company at 1-800-347-8272 24 hours a day, 7 days per week.	
<b>NOTE TO PHYSICIAN:</b> Contains petroleum distillate – vomiting may cause aspiration pneumonia.	

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear the following:

- Long-sleeved shirt and long pants;
- Chemical-resistant gloves made of barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or Viton ≥ 14 mils when mixing/loading or when using handheld equipment;
- Shoes and socks and
- Chemical-resistant apron for persons cleaning equipment, and for handlers performing animal dip applications

**USER SAFETY REQUIREMENTS**

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

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

This product is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Do not contaminate water when disposing of equipment washwaters or rinsate. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. See Directions for Use for additional precautions and requirements.

Pollinator Advisory: This product is highly toxic to bees and other pollinating insects exposed to direct treatment or to residues in/on blooming crops or weeds. Do not allow this product to drift to blooming crops or weeds while bees are actively foraging the treatment area. Protect pollinating insects by following label directions intended to minimize drift and reduce pesticide risk to these organisms.

## DIRECTIONS FOR USE

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

### USE RESTRICTIONS:

- For both indoor and outdoor use.
- Apply this product only as specified on this label.
- Only for use on beef cattle and calves.
- Not for use on veal calves or dairy cattle.
- For pour on and spray applications, do not apply via either application method more than once to any one animal every two weeks.
- Do not apply more than 4 applications (pour on and/or spray) in any 6-month interval to beef cattle and calves.
- Keep away from eyes and mucous membranes of the animal being treated.
- Do not contaminate food or feedstuffs.
- Do not apply when food or feed is present.
- Remove or cover food processing equipment and food preparation surfaces or wash them before use.
- Do not make applications during rain. Avoid making applications when rainfall is expected before the product has sufficient time to dry (minimum 4 hours). Rainfall within 24 hours after application may cause unintended runoff of pesticide application.
- Do not make applications with a sponge.
- Do not apply by high pressure hand wand, handheld foggers, or fog/mist generators.
- Not for broadcast application.
- Do not use this product directly on domestic (companion) animals (dogs, cats, puppies, or kittens).
- This product is not for use in outdoor residential misting systems (indoor or outdoor), or in metered release misting systems.
- Not for use in commercial animal premise automatic misting systems.
- Removable chemical extraction probes (also known as "stingers") used in suction/extraction systems must be rinsed within the pesticide container prior to removal.
- Do not apply this product to face of beef cattle or calves.
- 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.
- Do not apply the product into fish pools, ponds, streams or lakes. Do not apply directly to sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application.
- For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, please note that RF2301 LPD PO contains both a Group 15/diflubenzuron and Group 3A/lambda-cyhalothrin insecticide. Any insect population may contain individuals naturally resistant to RF2301 LPD PO and other Group 15 or Group 3A insecticides. The resistant individuals may dominate the insect population if these insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of RF2301 LPD PO and other Group 15 or Group 3A insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of the mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.

- When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insecticide/acaricide resistance management benefits of a mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
  - Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
  - Contact your local extension specialist for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
  - For further information or to report suspected resistance contact Central Garden & Pet Company at (1-800-347-8272) or at ([www.starbarproducts.com](http://www.starbarproducts.com)).

SHAKE WELL BEFORE USE.

For pour-on applications, do not apply more than once to any one animal every two weeks. In addition, do not apply more than four applications in any 6-month interval. Only beef cattle and calves may be treated with RF2301 LPD PO. May be used only for pour-on application to beef cattle and calves, indoors or outdoors.

**POUR-ON APPLICATION INSTRUCTIONS - READY TO USE – No dilution necessary.**

<b>Apply To:</b>	<b>Target Pests</b>	<b>Application Instructions</b>
, Beef Cattle and Calves	Chewing and Sucking Lice, Horn Flies, Stable Flies, House Flies, Horse Flies, Deer Flies	<p>For pour on applications, do not apply more than once to any one animal every two weeks. In addition, do not apply more than four applications in any 6-month interval. Only beef cattle and calves may be treated with RF2301 LPD PO.</p> <p>Apply 0.1 fl oz (3 ml) of RF2301 LPD PO per 100 lbs body wt. of cattle. This is equivalent to 1 fl oz (30 ml) (0.0017 lb. diflubenzuron, 0.0014 lb. piperonyl butoxide and 0.0003 lb. lambda-cyhalothrin). per 1,000 lb animal Pour correct dose along back directly from tip and measure container, graduated applicator gun or ladle/dipper. Keep away from eyes and mucous membranes of the animal being treated. RF2301 LPD PO is not recommended for use on veal calves.</p>

**SPRAY DILUTION APPLICATION INSTRUCTIONS – Dilution required.**

<b>Apply To:</b>	<b>Target Pests</b>	<b>Application Instructions</b>
Beef Cattle and Calves	Chewing and Sucking Lice, Horn Flies, Stable Flies, House Flies, Horse Flies, Deer Flies, Ticks	<p>For spray dilution applications, do not apply more than once to any one animal every two weeks. In addition, do not apply more than four applications in any 6-month interval. Only beef cattle and calves may be treated with RF2301 LPD PO.</p> <p>Dilute 4 fl. oz. (118.3 mL) (0.0069 lb. of diflubenzuron, 0.0058 lb. of piperonyl butoxide and 0.0012 lb. of lambda-cyhalothrin) of RF2301 LPD PO per gallon of water. Spray until wet, ensuring thorough coverage across entire body, targeting 1 quart of diluted spray per 1,000 lb animal. Ticks must be sprayed directly to be killed. Keep away from eyes and mucous membranes of the animal being treated. RF2301 LPD PO is not</p>



Apply To:	Target Pests	Application Instructions
		recommended for use on veal calves.

Special Note: This product is not effective in controlling cattle grubs, and can be used any time of year without risk of host-parasite reactions associated with grub treatment products.

Use this product in an integrated pest management system which may involve repeat treatments and the use of other pest control practices.

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original sealed container. Store in a cool, dry, well-ventilated (preferably locked) area that is inaccessible to children, animals, fertilizer, feed and foodstuffs. **PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING : [Nonrefillable Container (5 gallons or less)]** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. **[Nonrefillable Container (greater than 5 gallons)]** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

For information or in case of an emergency, call 1-800-347-8272. Visit our Web site: [www.starbarproducts.com](http://www.starbarproducts.com)

### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this Product 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 Central Garden & Pet Company or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Central Garden & Pet Company and Seller harmless for any claims relating to such factors.

Central Garden & Pet Company 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 Central Garden & Pet Company, and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, **CENTRAL GARDEN & PET COMPANY MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

In no event shall Central Garden & Pet Company or Seller 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 CENTRAL GARDEN & PET COMPANY 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 CENTRAL GARDEN & PET COMPANY OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Central Garden & Pet Company and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Central Garden & Pet Company.

Inhibidor and Starbar are trademarks of Wellmark International. Central Garden & Pet is a trademark of Central Garden & Pet Company.

**[Manufactured for]:**

Central Garden & Pet Company  
1501 East Woodfield Road 200W  
Schaumburg, IL 60173

[URL]