



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

May 20, 2022

Heather Friedli  
Regulatory Affairs Specialist  
Central Garden & Pet Company  
1501 E. Woodfield Road, Ste. 200W  
Schaumburg, IL 60173

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling and Formulation  
Amendment – Amend the label and CSF to the correct minimum guarantee statement,  
add an alternate source of an inert ingredient and update an inert ingredient source.  
Product Name: RF2230 D-Granules  
EPA Registration Number: 89459-93  
EPA Receipt Date: 02/04/2022  
Action Case Number: 00338889

Dear Ms. Friedli:

The amended labeling and Confidential Statement of Formula (CSF) referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, are acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

Please note that the record for this product currently contains the following acceptable CSF:

- Basic CSF dated 05/05/2022

Any CSFs other than that listed above are superseded/no longer valid.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 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 CFR § 152.3.

Should you wish to add/retain a reference to your company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the 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

Page 2 of 2

EPA Reg. No. 89459-93

Action Case No. 00338889

process. Therefore, should the EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

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

If you have any questions, please contact Jennifer Odom via email at [odom.jennifer@epa.gov](mailto:odom.jennifer@epa.gov).

Sincerely,

**Susanne  
Cerrelli** Digitally signed by  
Susanne Cerrelli  
Date: 2022.05.20  
13:10:19 -04'00'

Susanne Cerrelli, Risk Manager  
Microbial Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511M)  
Office of Pesticide Programs

Enclosure

[Indicates optional text]

## RF2230 D-Granules

Alternate brand name: Zoëcon® Duplex™-G

A DUAL ACTION extended residual BIOLOGICAL LARVICIDE AND INSECT GROWTH REGULATOR GRANULAR PRODUCT TO KILL MOSQUITO LARVAE AND PREVENT ADULT MOSQUITO EMERGENCE (including those mosquitoes that may transmit diseases, including West Nile Virus, Dengue, Chikungunya, and Zika Virus)

Mosquito Larvicide

Contains S-methoprene

Contains *Bti* and S-Methoprene IGR

Kills mosquito larvae and prevents adult mosquito emergence

Contains *Bacillus thuringiensis v. israelensis*

Prevents mosquitoes from becoming breeding, biting adults

Up to 28 days residual control when applied at rates of 5 – 20 pounds per acre

Easy to Apply Granules

Microbial pesticide and biochemical pesticide mosquito control combined

Controls *Aedes*, *Culex*, *Anopheles*, and other mosquitoes

Controls mosquitoes for up to 28 days of continuous wet when applied at rates of 5 – 20 pounds per acre

Controls mosquitoes for 14 days with as little as 2.5 pounds per acre

Controls *Aedes aegypti* for up to 21 days at 5 pounds per acre

### ACTIVE INGREDIENT:

*Bacillus thuringiensis* subspecies *israelensis* Strain BMP 144 solids, spores,  
and insecticidal toxins\* ..... 5.35%

(S)-Methoprene ..... 1.60%

**OTHER INGREDIENTS:** ..... 93.05%

**Total**..... 100.00%

\*Equivalent to 300 International Toxic Units (ITU/mg).

Note: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

EPA Reg. No. 89459-93

EPA Est. No.

Lot No.

Net Weight:

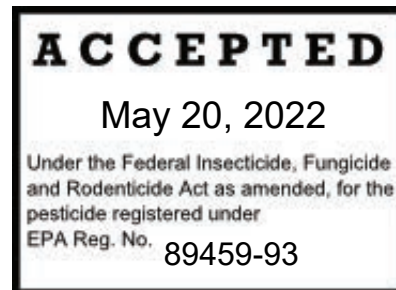
[This container is sold by weight not volume]

[Manufactured for:]

Central Garden & Pet Company

1501 East Woodfield Road, Suite 200W

Schaumburg, IL 60173



<b>FIRST AID</b>	
If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOTLINE NUMBER:</b> Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.	

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Mixers/loaders and applicators must wear:

Protective eyewear

Waterproof gloves

Mixers/loaders and applicators not in enclosed cabs must wear a NIOSH-approved particulate respirator with any N, P or R filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

**ENVIRONMENTAL HAZARDS**

Do not contaminate water when disposing of equipment washwater or rinsate.

**DIRECTIONS FOR USE:**

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

Do not apply directly to treated, finished drinking water reservoirs or animal watering troughs.

RF2230 D-Granules is a unique combination of a *Bacillus thuringiensis v. israelensis (Bti)* biological larvicide and S-Methoprene Insect Growth Regulator (IGR) that provides dual action control. RF2230 D-Granules provides quick kill of existing mosquito larvae and residual control of subsequent broods. This dual combination larvicide is highly effective against multiple broods of mosquitoes in a variety of habitats. RF2230 D-Granules, when applied to the water column, releases effective levels of *Bti* to begin killing larvae within 24 hrs. after application. Once the *Bti* has killed existing larvae, the IGR in RF2230 D-Granules provides residual control and prevents adult mosquito emergence for up to 28 days when applied at rates of 5 – 20 pounds per acre.

RF2230 D-Granules releases effective levels of the *Bti* biological larvicide for up to 72 hours after application and S-Methoprene insect growth regulator prevents the emergence of adult mosquitoes. Continue applications throughout the entire season to maintain control. IGR treated larvae continue to develop normally to the pupal stage where they die.

Rotary and fixed-wing aircraft equipped with granular spreaders capable of applying rates listed below may be used to apply RF2230 D-Granules. Ground equipment that will achieve even coverage at these rates may also be used.

Apply RF2230 D-Granules uniformly and repeat at intervals of 14 to 28 days.

**NOTE:** RF2230 D-Granules has no effect on mosquitoes that have reached the pupal or adult stage prior to treatment.

**APPLICATION TIMING:** Apply RF2230 D-Granules at any stage of larval mosquito development. Granules may be applied 7 to 14 days prior to flooding (i.e., "pre-hatch" or "pre-flood") in areas which flood. In such areas, one application of RF2230 D-Granules can prevent adult mosquito emergence from several subsequent floodings. The actual length of control depends on the duration and frequency of flooding events.

**APPLICATION RATES:** RF2230 D-Granules controls the major species of mosquitoes including: *Aedes*, *Anopheles*, *Culex*, and *Culiseta*. Apply RF2230 D-Granules at 2.5 - 20 lb/acre (5.6 - 11.2 kg/ha). Within these ranges, use lower rates when water is shallow [ $< 6''$ - $12''$ ] and vegetation and/or organic matter are minimal, and use higher rates when water is deep [ $> 1$  foot] and vegetation and/or organic matter are heavy. In water depths greater than 2 feet, double the highest application rate for each subsequent foot of water. Depending on water depth and degree of organic matter, lower use rates may provide less IGR residual. Application of RF2230 D-Granules to sites subject to water flow or exchange will diminish the product's effectiveness and may require higher application rates and/or more frequent applications. Lower residual activity may be seen at rates used at 5 pounds per acre or less; for consistent 28-day control, use rates at 7.5 pounds per acre or higher.

**APPLICATION SITES:**

RF2230 D-Granules may be applied to both crop and non-crop areas as directed above to temporary and permanent sites that support mosquito larval development. Examples of such sites include: snow pools, salt and tidal marshes, freshwater swamps and marshes (cattail, red cedar, and white maple marshes), woodland pools and meadows, dredging spoil sites, drainage areas, ditches, wastewater treatment facilities, livestock runoff lagoons, retention ponds, harvested timber stacks, swales, storm water drainage areas, sewers, catch basins, tree holes, water-holding receptacles (e.g., tires, urns, flower pots, cans, and other containers), irrigated and non-irrigated pastures, hoof prints and other natural and manmade water-holding sites, containers and depressions. Examples of crop areas include: irrigated croplands; pastures; rangeland; vineyards; rice fields (domestic and wild); date palm, citrus, fruit, and nut orchards; berry fields; bogs and row crops.

**STORAGE AND DISPOSAL:** Do not contaminate water, food or feed by storage or disposal.  
**Pesticide Storage:** Store closed containers in a cool, dry place. **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: Plastic Container:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or 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. **Paper/Plastic Bags:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.  
**Refillable Totes (2000 lb):** Refillable container. Refill this container with this product only. Do not reuse this container for any other purpose. Return empty totes to [company name] for cleaning and recycling. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. If the container is not returned to [company name], to clean the container before final disposal, complete empty container by tapping sides and bottom to loosen clinging material into application equipment or a mix tank. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration or by other procedures approved by state and local authorities.

For information, call 1-800-248-7763 or visit our Web site: [www.altosid.com](http://www.altosid.com)  
[/www.centralmosquitocontrol.com](http://www.centralmosquitocontrol.com)

**WARRANTY****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. 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 Central Garden & Pet Company. All such risks shall be assumed by the users or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, Central Garden & Pet Company 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 Central Garden & Pet Company is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Central Garden & Pet Company 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 Central Garden & Pet Company's election, the replacement of product.

Duplex and Zoëcon are trademarks of Wellmark International

Made in USA