



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

January 27, 2017

Nancy Huebl
Wellmark International
1501 East Woodfield Rd., Suite 200 W
Schaumburg, IL 60173

Subject: Notification per PRN 98-10 –Deletion of cockroach and ant in label
Product Name: RF2227 D GRAIN EC
EPA Registration Number: 89459-87
Application Date: 1/5/2017
Decision Number: 525081

Dear Ms. Huebl:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

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.

If you have any questions, you may contact Angela Hollis at 703-347-0216 or via email at hollis.angela@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Kable Bo Davis", enclosed in a hand-drawn oval.

Kable Bo Davis, Product Manager 3
Invertebrate and Vertebrate Branch 1
Registration Division (7505P)
Office of Pesticide Programs

RF2227 D GRAIN EC

Alternate brand name: Centynal™ EC Insecticide

PROTECTS STORED GRAINS AND SEEDS AGAINST DAMAGE FROM INDIAN MEAL MOTH, SAW-TOOTHED GRAIN BEETLE, RED FLOUR BEETLE, RICE WEEVIL, MAIZE WEEVIL, AND MANY OTHER LISTED PESTS

Emulsifiable Concentrate
May be diluted with water or oil
Miscible in dust controlling oils
May be tank-mixed
Residual Control of listed pests
Kills listed adult insects and exposed larvae

ACTIVE INGREDIENT:

Deltamethrin*4.75%

OTHER INGREDIENTS:95.25%

Total:100.00%

*Contains 0.41 lb deltamethrin per gallon

**KEEP OUT OF REACH OF CHILDREN
WARNING**

See side/back panels for additional Precautionary Statements

EPA Reg. No. 89459-87
EPA Est. No.

Batch Code:
NET CONTENTS:

NOTIFICATION

89459-87

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

01/27/2017

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - WARNING: May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield or safety glasses). 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. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID	
Call a poison control center or doctor immediately for treatment advice.	
If swallowed	<ul style="list-style-type: none">• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
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 on skin	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.
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.	

ENVIRONMENTAL HAZARDS

This product is extremely toxic to freshwater and estuarine fish and invertebrates. To protect the environment, do not allow pesticide to enter or runoff into storm drains, drainage ditches, gutters, or surface waters. 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. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems.

This pesticide is highly toxic to bees exposed to direct treatment. Do not apply or allow it to drift to crops or weeds on which bees are actively foraging.

PHYSICAL AND CHEMICAL HAZARDS

Do not use water-based sprays of **RF2227 D Grain EC** in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

DIRECTIONS FOR USE

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

PRODUCT INFORMATION

RF2227 D Grain EC is an emulsifiable concentrate insecticide for use both indoors and outdoors for effective knockdown and residual control of listed pests. Also for use on stored grains and for treating empty bins and warehouses for stored product pest control. **RF2227 D Grain EC** provides effective knockdown and control of listed adults and larvae.

Mixing Instructions

Mix **RF2227 D Grain EC** with water and apply using a hand pressurized or power operated sprayer. For outdoor broadcast application, apply as a fine or coarse spray using suitable equipment.

Dilution Instructions:

- Add half the water to the spray tank
- Add **RF2227 D Grain EC** as specified in the appropriate application rates table
- Agitate well to insure proper mixing
- Add the remaining water slowly

Note: Re-agitation of spray dilution may be required if left overnight. It is recommended that water be used as the diluent for applications in non-commodity treatments. Use a mixed dilution within 48 hours of preparing.

Tank Mixing: **RF2227 D Grain EC** may be tank-mixed with other currently registered pesticides unless prohibited by the tank-mix partner label. To check for product compatibility, a small volume mixing test with other products is recommended. The more restrictive label will apply when tank-mixing.

PEST CONTROL INDOORS

Mix **RF2227 D Grain EC** with water and apply indoors as a crack and crevice spot or general surface treatment with hand pressurized or power operated sprayers (Actisol) or other suitable equipment.

Approved use sites include the food/feed and non-food/non-feed areas of: bakeries, bottling facilities, breweries, cafeterias, candy plants, canneries, dairy product processing plants, food manufacturing plants, food processing plants, food service establishments, granaries and grain mills, industrial buildings, installations, meat, poultry and egg processing and packaging plants, rail cars, restaurants, ships, trailers, trucks, warehouses, wineries and other locations where pests are a problem.

Crack and Crevice: Apply **RF2227 D Grain EC** spray mixture to cracks and crevices in and around baseboards, floors, walls, appliances, areas around water and sewer pipes, and other voids with a low pressure system using a pinpoint or variable pattern nozzle.

Spot Treatment: Apply **RF2227 D Grain EC** as a spot treatment in and around cupboards, and between, beneath and behind equipment or appliances using a low pressure system with fan-type nozzle.

Use Restrictions:

- Do not treat entire area of floor, carpet, or floor coverings.
- Do not apply as a space spray.
- Do not make applications to areas where prolonged contact by humans can occur.
- Limit spot treatment to infested floor coverings.
- Restrict applications to furniture where no prolonged contact by humans will occur.
- Do not allow people or pets to contact treated areas until spray has dried.
- Do not apply this product more than once every 21 days.
- Do not apply **RF2227 D Grain EC** until the location of heating or air conditioning ducts, vents, water and sewer lines and electrical conduits are identified. Once known, applications may be made around these structures, however, avoid contamination of these structures and airways.

Application is prohibited directly into 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 this product to enter any drain during or after application.

Applications to building foundations (higher than 3’): all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications only.

Application Rates			
Pests	Concentration of Active Ingredient ¹	Dilution Rate	Use Instructions
Pantry pests (Indoors) Cockroaches Spiders Crickets Ground beetles Ants Millipedes Flies Pillbugs Silverfish Moths Psocids Grain beetles Springtails	0.01% - 0.06% w/w	0.25 – 1.5 fl oz/gallon 12.5 – 75 fl oz/50 gallons 25 – 150 fl oz/100 gallons	Apply at 21 day intervals. Treat areas that insects inhabit or where they are normally found. Use 0.25 to 1.5 fl oz of RF2227 D Grain EC in sufficient amount of water and apply 1 gallon dilution to adequately cover 1,000 sq ft. Do not allow dripping or runoff to occur. Under conditions of severe pest infestation, when quick knockdown and/or longer residual control is desired use higher rates.
¹ The specified rate for maintenance treatments is 0.01% and for cleanout treatments is 0.03%. For control of severe infestations and longer residual control, use the 0.06% rate. More frequent applications may be needed on concrete surfaces.			

Pantry Pest Control

Apply to kill adult and manageable stages of listed insect pests including Lesser Grain Borers, Grain Weevils, Flour Beetles, Saw-toothed Grain Beetles, Cigarette Beetles, Merchant Grain Beetles, Angoumois Grain Moths, Mediterranean Flour Moths, Indian Meal Moths, Grain Mites.

Application Instructions

Apply to cupboards, shelving, and storage areas. Before spraying, remove all foodstuffs, utensils, shelf paper and other objects. Allow treated surfaces to dry and cover shelves with clean paper prior to replacing foodstuffs, utensils or other items. Discard any foodstuff accidentally contaminated with any spray solution.

FOOD/FEED HANDLING ESTABLISHMENTS

Applications are permitted in food/feed and non-food/non-feed areas of food/feed handling and processing establishments as a general surface, spot or crack and crevice treatment to control labeled pests.

Food/Feed handling establishments are defined as places other than private residences in which exposed food/feed is held, processed, prepared or served. Included also are areas for receiving, storing, packing (canning, bottling, wrapping, boxing), preparing, edible waste storage and enclosed processing systems (mills, dairies, edible oils, syrups) of food/feed. Serving areas where food/feed is exposed and the facility is in operation are also considered food/feed areas.

Non-Food/Non-Feed Areas: Areas include garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, mop closets and storage (after packaging, canning or bottling). Treat any area that insects are observed or at points of entry.

General Surface Applications: Before application, cover or remove all food/feed processing and/or handling equipment. After application, wash all equipment, benches, shelving and other surfaces that food/feed will contact in food/feed processing plants, cafeterias, and similar facilities. Clean food/feed handling or processing equipment and rinse well with clean, fresh water. After application in bakeries, clean all food contact surfaces thoroughly with appropriate equipment. Do not use this application method in the food/feed handling areas of the facility when the facility is in operation or feeds/feeds are exposed. Do not apply to food/feed products other than stored grains. Do not apply to food or food-handling surfaces.

Spot or Crack and Crevice Applications: Except in federally inspected meat and poultry plants, spot or crack and crevice applications may be made while the facility is in operation provided exposed food is covered or removed from area being treated prior to application.

STORED GRAIN

For use to control adult and accessible stages of larvae of listed insect pests including, lesser grain borers, larger grain borers, Angoumois grain moths, Indian Meal moths, tobacco moths, dermestids, and bean weevils; also to suppress populations of granary weevils, rice weevils, maize weevils, saw-toothed grain beetles, red flour beetles, and confused flour beetles.

In instances of high weevil complex pressure or suspected tolerance, the use of piperonyl butoxide (PBO) synergist may be used as a tank mix partner. Use PBO at a ratio of 1 part **RF2227 D Grain EC** to 1.5 parts PBO. **RF2227 D Grain EC** may be tank-mixed with other pesticide products such as Pyronyl™ Crop Spray. The more stringent label will apply when tank-mixing.

Directions for Treatment

Dilute **RF2227 D Grain EC** with water or approved dust controlling oils, mineral or soybean oils and apply to the moving grain stream as a coarse spray to provide a concentration of 0.5 ppm - 1 ppm of deltamethrin [brand name] on the grain.

For applications with water, use 3 - 5 gallons of liquid per 1,000 bushels of grain. Use more or less dilution volume depending on the situation but ensure that uniform coverage is obtained. For rough rice, use 10 gallons of water per 1,000 bushels. Maintain agitation before and during application. Use a mixed dilution within 48 hours of preparing. Re-agitation of spray dilution may be required if left overnight.

When using oils as a diluent, follow the oil manufacturers' recommendations. For best results, apply the solution as uniformly as possible as the grain is placed into storage.

For stored grain, apply **RF2227 Insecticide** in solution at the labeled rate of 3 - 5 gallons of dilution per 1,000 bushels to achieve a 0.5 – 1 ppm concentration of deltamethrin [brand name]. Apply at rates as shown in the tables below:

AMOUNT OF RF2227 D GRAIN EC/1,000 BUSHELS OF GRAIN

Commodity	RF2227 D Grain EC TREATMENT AT 0.5 PPM		RF2227 D Grain EC TREATMENT AT 1 PPM		Gallons of Diluent	Liters of Diluent
	fl oz	ml	fl oz	ml		
Barley	7.75	229	15.50	458	3 – 5	11.3 - 19
Corn	9	266	18	532	3 – 5	11.3 – 19
Oats	5.15	152	10.30	304	3 – 5	11.3 – 19
Popcorn	9	266	18	532	3 – 5	11.3 - 19
Rice	7.20	212	14.40	424	3 – 5	11.3 – 19
Rye	9	266	18	532	3 – 5	11.3 – 19
Sorghum (milo)	8	236	16	472	3 – 5	11.3 – 19
Wheat	9.60	283	19.20	566	3 – 5	11.3 – 19

AMOUNT OF RF2227 D GRAIN EC/TON OF GRAIN

Commodity	RF2227 D Grain EC @ 0.5 ppm		RF2227 D Grain EC @ 1 PPM		Ounces of Diluent	Milliliters of Diluent
	fl oz	ml	fl oz	ml		
					13 – 21	384 – 630
Barley	0.34	10	0.68	20	13 – 21	384 – 630
Corn	0.34	10	0.68	20	13 – 21	384 – 630
Oats	0.34	10	0.68	20	13 – 21	384 – 630
Popcorn	0.34	10	0.68	20	13 – 21	384 – 630
Rice	0.34	10	0.68	20	13 – 21	384 – 630
Rye	0.34	10	0.68	20	13 – 21	384 – 630
Sorghum (milo)	0.34	10	0.68	20	13 – 21	384 – 630
Wheat	0.34	10	0.68	20	13 - 21	384 – 630

SEED TREATMENT

Apply **RF2227 D Grain EC** to protect stored grain seed against injury from stored grain insects listed. Clean and treat seed storage areas prior to storage. If seed is infested, fumigate** to control existing populations and apply **RF2227 D Grain EC** for residual protection. **RF2227 D Grain EC** may also be used in conjunction with registered fungicides or other insecticide seed protectants, to protect barley, corn, oats, popcorn, rice, rye, sorghum and wheat seed during the seed treating process, and prior to bagging or placing in bulk seed storage at the rate of 0.5 - 1 ppm. When treating seed with other pesticide products, properly tag the treated seed indicating: "Do not use the seed for food, feed, or oil purposes." Seed treated with **RF2227 D Grain EC** alone is considered grain.

**Fumigate with EPA-registered fumigant according to manufacturer's label recommendations.

GRAIN BINS AND WAREHOUSES

Dilute 0.25 – 1.5 fl oz of **RF2227 D Grain EC** with water to make 1 gallon of solution. Before storing or handling grain, apply finished spray to equipment, wall and floor surfaces of grain bins and warehouses at the rate of 1 gallon per 1,000 sq ft but do not allow runoff to occur. Apply after bins and buildings have been thoroughly cleaned. If infestations are severe or there are areas that are difficult to treat with a conventional spray, fumigation is recommended with an EPA-registered fumigant.

Use **RF2227 D Grain EC** as a perimeter treatment to prevent infestation of these structures. Apply to areas where listed pests are seen or may find entrance. Treat a band of soil or turf up to 6-10 feet wide around and adjacent to structures and treat the foundation to a height of 2 to 3 feet. Mix 0.25 – 1.5 fl oz of **RF2227 D Grain EC** with water to make 1 gallon of solution. Apply as a coarse spray at a rate of 1 gallon per 1,000 sq ft. Thoroughly and uniformly wet the barrier area but do not allow runoff to occur.

PEST CONTROL OUTDOORS

Apply **RF2227 D Grain EC** as a perimeter treatment, residual spray or broadcast application to lawns, grounds and ornamental plantings. Apply as a perimeter treatment or residual spray around non-residential settings. Begin treatments at the first sighting of listed pests.

Residual Spray:

Apply **RF2227 D Grain EC** as a coarse low-pressure spray diluted in water at the rate of 0.75 to 1.5 fl oz to surfaces of buildings, porches, screens, window frames, eaves, patios, refuse dumps, garages and lawns.

Perimeter Treatments:

For best results, apply **RF2227 D Grain EC** to areas where listed pests are seen and may find entrance. Treat a band of soil or turf up to 6-10 feet wide around and adjacent to buildings and treat the building foundation to a height of 2 to 3 feet. Apply as a coarse spray at the rate of 0.25 to 1.5 fl oz of **RF2227 D Grain EC** in sufficient amount of water. (See Mixing Directions for Perimeter Application below). Use an adequate volume to thoroughly and uniformly wet the barrier area but do not allow runoff to occur.

MIXING DIRECTIONS FOR RF2227 D GRAIN EC OUTDOOR PERIMETER APPLICATION								
RF2227 D GRAIN EC DILUTION (0.25 fl oz/1,000 sq ft)								
Tank Size	15 Gallons		25 Gallons		50 Gallons		100 Gallons	
Finished Spray: Gallons/1,000 sq ft	RF2227 Per Tank (fl oz)	Structures Per Tank*	RF2227 Per Tank (fl oz)	Structures Per Tank*	RF2227 Per Tank (fl oz)	Structures Per Tank*	RF2227 Per Tank (fl oz)	Structures Per Tank*
1	3.75	15	6.25	25	12.50	50	25.00	100
3	1.25	5	2.08	8	4.17	16	8.33	33
5	0.75	3	1.25	5	2.50	10	5.00	20
10	0.37	1.5	0.63	2.5	1.25	5	2.50	10
*Based on RF2227 D Grain EC applied at 0.25 fl oz per 1,000 sq ft per structure								
RF2227 D GRAIN EC DILUTION (1 fl oz/1,000 sq ft)								
Tank Size	15 Gallons		25 Gallons		50 Gallons		100 Gallons	
Finished Spray: Gallons/1,000 sq ft	RF2227 Per Tank (fl oz)	Structures Per Tank*	RF2227 Per Tank (fl oz)	Structures Per Tank*	RF2227 Per Tank (fl oz)	Structures Per Tank*	RF2227 Per Tank (fl oz)	Structures Per Tank*
1	15.0	15	25.0	25	50	50	100	100
3	5.0	5	8.4	8.3	16.7	16.7	33.3	33.3
5	3.0	3	5.0	5	10.0	10	20.0	20
10	1.5	1.5	2.5	2.5	5.0	5	10.0	10
*Based on RF2227 D Grain EC applied at 1 fl oz per 1,000 sq ft per structure								

Do not apply **RF2227 D Grain EC** until the location of heating or air conditioning ducts, vents, water and sewer lines and electrical conduits are identified. Once known, applications may be made around these structures, however, be careful to avoid contamination of these structures and airways. Do not apply through any type of irrigation system. Do not water the treated area to the point of runoff. Do not make applications during rain.

STORAGE and DISPOSAL: Do not contaminate water, food, or feed by storage or disposal. **PESTICIDE STORAGE** – Mix as needed. Store in original container in a secured, dry storage area. Avoid extremes in temperatures. Prevent cross-contamination with other pesticides and fertilizers. If the container is leaking and/or material is spilled, on floor or paved surfaces, absorb on sawdust or other commercially available absorbing material, sweep up and remove to chemical waste area for your disposal. Concentrate is stable at normal storage temperatures. **PESTICIDE DISPOSAL** - Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility. **CONTAINER DISPOSAL** – Nonrefillable container. Do not reuse or refill this container. Triple rinse (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 after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, 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.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer 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, because of manner of use and other factors beyond Central Garden & Pet Company's control, it is impossible for Central Garden & Pet Company to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, CENTRAL GARDEN & PET COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR 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 container 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.

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For information or in case of an emergency, call 1-800-248-7763.
Visit our Web site: www.bugfreegrains.com