



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

August 24, 2017

Dr. Matthew Brooks  
Director  
Representative  
LG Life Sciences c/o Ag-Chem Consulting  
12208 Quinque Lane  
Clifton, VA 20124

Subject: Notification per PRN 98-10 –Minor changes to label  
Product Name: ESFENVALERATE-PCO  
EPA Registration Number: 71532-26  
Application Date: 7/25/2017  
Decision Number: 532009

Dear Mr. Brooks:

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](mailto:hollis.angela@epa.gov).

Sincerely,



Michael Wagman, Acting Product Manager 4  
Invertebrate and Vertebrate Branch 1

For:  
Elizabeth Fertich, Acting Product Manager 3  
Invertebrate and Vertebrate Branch 1  
Registration Division (7505P)  
Office of Pesticide Programs

Enclosure

**NOTIFICATION**

71532-26

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:

08/24/2017

**Esfenvalerate - PCO**

Water or Oil Dilutable

CONTROLS NUMEROUS PESTS IN AND AROUND STRUCTURES RECOMMENDED FOR  
COMMERCIAL AND INDUSTRIAL USE

[ ] indicates alternate or optional wording.

For Use In and Around the Home and Food and Non-Food Areas of: Schools, Warehouses, Office Buildings, Apartment Buildings, Theatres, Hotels, Motels, Kennels, Food Processing Plants, Food Service Establishments, Truck Trailers, Railroad Cars, and Food Manufacturing and Warehousing Establishments. Also for Use on Lawns to Kill Fleas and Ticks.

For Use in Void Areas to kill hidden pests such as ants ( including carpenter ants), bedbugs, cockroaches, scorpions and stored product pests

[Guaranteed to work or your money back] [Kills pests on indoor & outdoor surfaces.] [Mixes with water.] [Makes up to \_\_Gallons.]

**ACTIVE INGREDIENT:**

Esfenvalerate (CAS #66230-04-4).....8.4%

INERT INGREDIENTS.....91.6%

TOTAL.....100.0%

**KEEP OUT OF REACH OF CHILDREN**

**WARNING AVISO**

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

[See inside booklet for additional Precautionary Statement, [First Aid,] and Directions for Use.]

<b>FIRST AID</b>	
<b>IF SWALLOWED:</b>	Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>IF ON SKIN OR CLOTHING:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call o poison control center or doctor for treatment advice.
<b>NOTE TO PHYSICIAN</b>	
If on skin, after drying apply vitamin E cream or oil if available. If not available, apply vegetable oil liberally over painful areas. The oil or cream may be used repeatedly until relief is achieved.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

Net Contents \_\_\_\_\_

Manufactured by:

LG Chem, Ltd.

28 YEOUNI-DAERO, YEONGDEUNGPO-GU

SEOUL 07336

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

WARNING. May be fatal if swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

ENVIRONMENTAL HAZARDS. This product is toxic to fish, birds and other wildlife. 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 ornamental fish ponds. Do not contaminate water when disposing of equipment wash waters or rinsate. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

[Label May Contain Some Or All Of The Following Statements]

[Dual Benefits – fast knockdown and long residual]

[Fleas are knocked down in minutes]

[Extremely low VOCs – great for the environment]

[2% VOC – 25x reduction in VOCs versus major competitors]

[Fast knockdown of roaches and fleas]

[Low odor]

**DIRECTIONS FOR USE**

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

Esfenvalerate - PCO can be mixed with an EPA-registered Insect Growth Regulator (IGR) or pyrethrin-containing product in areas where these products are allowed to be sprayed. Please check product-specific label directions before using. Do not tank mix this product with dichlorvos-(DDVP)-containing products.

Do not apply directly to food. Cover or remove all food and food-processing equipment during application. After spraying in meat packing plants, bakeries, and other food processing plants, wash all equipment, benches, shelving, etc. where exposed food will be handled with an effective cleaning compound, and then rinse with potable water. In the home, all food processing surfaces and utensils must be covered during treatment or

thoroughly washed before use following treatment. Cover exposed food. Do not spray plants used for food or feed.

Remove pets and birds and cover fish aquariums before spraying.

Do not allow children or pets to contact treated surfaces until spray has dried.

Do not apply this product in occupied patient rooms or in any rooms/areas while occupied by patients, the elderly or infirm. Do not apply to classrooms while in use. Do not apply in institutions (including libraries, sports facilities, etc.) in the immediate area where occupants are present.

**SHAKE WELL BEFORE USE**

**INDOOR USE:**

**GENERAL:** Use Esfenvalerate - PCO insecticide to control the pests indicated in the listed areas as a contact spray by mixing either 0.42 fluid ounces of concentrate in 1 gallon of water or oil or 0.83 fluid ounces of concentrate in 1 gallon of water or oil and mix thoroughly before use. One 0.42 fluid ounces of Esfenvalerate - PCO per 1 gallon of water or oil will make a spray containing 0.027% active ingredient, 0.83 fluid ounces per 1 gallon will make a spray containing 0.05% active ingredient. For initial clean out of heavy infestations use 0.83 fluid ounces of concentrate per 1 gallon of spray; for maintenance control or light infestations use 0.42 fluid ounces of concentrate per 1 gallon. When using oil as the diluent, an odorless light petroleum hydrocarbon as defined by CFR Title 21, Sec. 172.884 must be used for all food areas and food related applications. For all applications of contact sprays, use at the rate of one (1) gallon (diluted spray) per 1,000 square feet of surface area.

**APPLICATION IN FOOD PROCESSING/HANDLING ESTABLISHMENTS**

**DO NOT TREAT ESTABLISHMENTS WHERE LIVESTOCK FEED IS PRESENT**

Application Only Within Food and Non-Food Areas of Food Service and Handling Establishments (Places Other Than Private Residences) including or consisting of: Restaurants, Grocery Stores, Bakeries, Food Manufacturing and Processing Establishments, and Food Warehousing Establishments. Do not treat establishments where livestock feed is present.

Food areas include areas for receiving, storage, packing, canning, bottling, wrapping, boxing, preparing, edible waste storage, enclosed processing systems, mills, and dairies. Serving areas are places where prepared foods are served, such as dining rooms, but excluding areas where foods may be prepared or held. Non-food areas include garbage rooms, lavatories, floor drains to sewers, entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets, and storage after canning or bottling.

### **As a Surface Spray:**

**Do not apply when food processing facility is in operation or foods are exposed.**

**Do not apply this spray to surfaces or utensils that may into contact with food; excessive residues in food may result.**

To Kill the Accessible Stages of Granary Insects, Rice Weevils, Confused Flour Beetles, Rust Red Flour Beetles, Saw-Toothed Grain Beetles, Cadelles, Meal Moth Larvae and Adults, Cigarette Beetles, Drug Store Beetles and Granary Weevils: Apply as a coarse wet spray to surfaces where these pests are normally found, such as floors and baseboards and around walls, benches, and pieces of equipment. Use at a dosage of one (1) gallon of spray per 1,000 square feet. Pay particular attention to cracks, crevices, and similar protected locations in floors and walls. Spray thoroughly around and into floor drains, non-food conveyors, and other areas where granary insects may be found. Do not apply when food processing facility is in operation or foods are exposed. Do not apply this spray to surfaces or utensils that may come into contact with food; excessive residues in food may result.

Repeat Application as needed, but do not exceed more than one (1) application every fourteen (14) days.

To Kill Ants, Centipedes, Cockroaches, Crickets, Earwigs, Millipedes, Psocids, Scorpions, Silverfish, Sowbugs, Spiders, and Waterbugs: Apply this spray with a sprayer that produces coarse, wetting droplets into all cracks and crevices in woodwork and floors, underneath sinks, areas behind pipes, and in all places where these insects shelter. Use a dosage of one (1) gallon of spray per 1,000 square feet. Contact as many insects as possible with direct spray. Repeat applications as needed, but do not exceed more than one (1) application every seven (7) days in restaurants and similar food service establishments or more than one (1) application every fourteen (14) days in all types of food handling establishments.

### **As A Space Spray:**

To Kill Cockroaches, Houseflies, Mosquitoes, Gnats, Spiders, Silverfish, Scorpions and Small Flying Moths: Close room and shut off all air conditioning or ventilating equipment. For space spray applications use a maximum of four (4) ounces of concentrate diluted in one (1) gallon of oil ( or oil based-based pyrethrin product registered for space spray use) only to make a 0.25% spray. Use diluted spray in a mechanical aerosol fogger or generator which produces particles of aerosol size thirty (30) microns, or less). Direct spray first into all cracks and crevices, behind all equipment, appliances, cupboards, or any dark harborage areas, then treat as a space spray directing the spray towards the ceiling and upper corners of the room at the rate of one (1) ounce diluted spray per 1,000 cubic feet of space. Do not remain in

treated area. Keep area closed for at least 1/2 hour and ventilate thoroughly before re-entry. Do not repeat application more than once every three (3) days.

To Kill The Adult and Accessible Forms of Insect Pests (such as Rice Weevil, Yellow Meal Worm, Cadelle, Confused Flour Beetle, Saw-Toothed Grain Beetles, Angoumois Grain Moth, Mediterranean Four Moth, Indian Meal Moth, Cigarette Beetle, Grain Mites and Cockroaches) of Stored Food In Warehouses, Storage Rooms and and Facilites and Similar Locations: Do not apply when food processing facility is in operation or foods are exposed. Do not apply this spray to surfaces or utensils that may come in contact with food. Food contact surfaces and equipment should be thoroughly cleaned with an effective cleaning compound and rinsed with potable water before using.

Infested stored products should be removed and destroyed, fumigated or treated with other products approved for this use.

Use as above in mechanical aerosol foggers at the rate of one (1) ounce diluted spray per 1,000 cubic feet of space. Keep area closed for at least 1/2 hour. Do not remain in treated area and ventilate thoroughly before re-entry. Do not repeat application more than once every three (3) days.

To Treat Voids in Equipment and Structures: To kill Ants (including Carpenter Ants), Bedbugs, Centipedes, Cockroaches, Crickets, Earwigs, Psocids, Scorpions, Silverfish, Spiders, Waterbugs, and Insect Pests of Stored Food: Dilution with oil or pyrethrin-containing oil based products ( 0.5% or 1.0% Pyrethrin should be sufficient) will provide best aerosol particle size for better penetration of wall, drop ceiling or other void-type spaces in structures or equipment with this type of application method. Addition of an IGR is also possible. To kill insects harboring in wall voids and other inaccessible spaces in equipment and structures, use injection equipment designed for deep void ULV (Ultra Low Volume) applications. Follow the injection equipment manufacturer's recommendations for proper set up and air pressures. Place the applicator tip at or into the void space to be treated. For inaccessible voids, it may be necessary to drill an access hole(s). Inject product into the void space in short bursts, allowing the air pressure to push insecticide deep into the space. Avoid applying to the point of runoff or drip. Ventilate area thoroughly before re-entry. Do not reapply more than every fourteen (14) days.

### **RESIDENTIAL/COMMERCIAL USE INDOORS:**

Application Within Residential and Non-Residential Buildings Including Homes, Apartment Buildings, Kennels, and Non-Food Areas of Industrial, Institutional, and Commercial Buildings, such as Hospitals, Hotels, Warehouses, Truck Trailers, Railroad Cars, Theatres, Office Buildings, and Schools.

GENERAL: Apply as a coarse wet spray to thoroughly treat hiding places, such as cracks, crevices, and moist areas around pipes, under refrigerators, and along baseboards to control

pests listed below. Use at the rate of one (1) gallon of spray mixture per 1,000 square feet. Spray directly on insects when possible. Do not permit humans or pets to contact treated surfaces until the spray has dried. Repeat as necessary. Do not treat establishments where livestock feed is present. **Do not apply using ULV equipment in residential buildings.**

To Kill Ants, Centipedes, Cockroaches, Crickets, Earwigs, Millipedes, Psocids, Scorpions, Silverfish, Sowbugs, Spiders, and Waterbugs: Spray areas where these pests are found or may hide, including dark corners of rooms and closets; cracks and crevices in walls; along baseboards and door and window frames; behind and beneath sinks, stoves, refrigerators and cabinets; and around garbage cans, plumbing and other utility installations. Pests driven out of hiding places must be sprayed directly. For Ants, apply to ant trails, around doors and windows, and wherever these pests may find entrance. Repeat as necessary.

To Kill Brown Dog Ticks and Fleas: For Control of Brown Dog Ticks, thoroughly apply as a spot treatment to infested areas such as pet beds and resting quarters; nearby cracks and crevices; along and behind baseboards, window and door frames; and localized areas of floor and floor coverings where these pests may be present. For control of Fleas, thoroughly apply a fine particle broadcast spray using the 0.42 fluid ounces of concentrate per one (1) gallon of water dilution for infested rugs, carpets, and pet resting areas. Prior to treatment, aquariums and fish bowls must be covered and birds, such as canaries, removed from the area. Do not permit humans or pets to contact treated surfaces until the spray has dried. Old bedding must be removed and replaced with clean, fresh bedding after treatment. Do Not Spray Pets With This Product. Treat dogs and cats with a product registered for use on animals.

To Kill Carpenter Ants: Apply 0.83 fluid ounces per 1 gallon of water as a coarse spray around doors, door frames, windows, and other areas where these ants enter the premises or hide. Spray into cracks and crevices and through openings or small newly drilled holes into wall voids where these ants or their nests are present.

To Treat Voids in Equipment and Structures: To kill Ants (including Carpenter Ants), Bedbugs, Centipedes, Cockroaches, Crickets, Earwigs, Psocids, Scorpions, Silverfish, Spiders, Waterbugs, and Insect Pests of Stored Food: Dilution with oil or pyrethrin-containing oil based products ( 0.5% or 1.0% Pyrethroid should be sufficient) will provide best aerosol particle size for better penetration of wall, drop ceiling or other void-type spaces in structures or equipment with this type of application method. Addition of an IGR is also possible. To kill insects harboring in wall voids and other inaccessible spaces in equipment and structures, use injection equipment designed for deep void applications. Follow the injection equipment manufacturer's recommendations for proper set up and air pressures. Place the applicator tip at or into the void space to be treated. For inaccessible voids, it may be necessary to drill an access hole(s). Inject product into the void space in short bursts, allowing the air pressure to push insecticide deep into the space. Avoid applying to the point of runoff or drip. Ventilate area thoroughly before re-entry. Do not reapply more than every fourteen (14) days.



## **OUTDOOR USE:**

**GENERAL:** Use Esfenvalerate - PCO at the rate of 0.83 fluid ounces per 1 gallon of water to control contact on Ants, Cockroaches, Crickets, Sowbugs, Spiders, and Ticks. Use at the rate of one (1) gallon per 1,000 square feet to outside surfaces of buildings, porches, patios, garages and other areas where these pests have been seen or are found. **Do not spray in or near fish ponds or other bodies of water. Avoid soaking young or flowering plants.**

Building Perimeter Treatment: To help prevent infestations of buildings by Ants, Crickets, Spiders, Centipedes, and Sowbugs (Pillbugs), treat a 12-18 inch band of soil or other substrate adjacent to buildings and the building foundation to a height of 2 to 3 feet where these pests are active and may find entrance. Use 0.83 fluid ounces per 1 gallon of water and apply as a coarse wet spray at the rate of one (1) gallon per 1,000 square feet.

**TO KILL EXPOSED/SWARMING TERMITES: OUTDOORS ONLY.** Use 0.83 fluid ounces of Esfenvalerate - PCO per 1 gallon of water and apply as a coarse, wetting spray where swarming termites are seen emerging from wood piles, wooden fence posts, wooden structures, or from the ground. Swarming usually occurs in the spring or at other times when a termite colony becomes overcrowded and new reproductive termites with wings emerge and fly away to mate and establish new colonies. This treatment will control the sprayed termites and will not protect the structure from which the swarm is coming. Use only as a contact spray to kill emerging reproductive (winged) and worker termites emerging from infested wood.

**TO KILL WOOD-DESTROYING PESTS: OUTDOORS ONLY.** Carpenter Bees, Carpenter Ants, Old House Borers, Powder Post Beetles, Furniture Beetles, Round-Headed House Borers, and Deathwatch Beetles. Use 0.83 fluid ounces of Esfenvalerate - PCO per 1 gallon of water and apply as a coarse, wetting spray to exposed pests and to the damaged areas of wood, spraying into galleries or tunnels in the exposed wood. Also spray around doors, door frames, windows, and other areas where these pests may enter the house or hide. Spray into cracks and crevices and, if necessary, drill small holes and spray into inaccessible wooden structural voids where these pests are suspected.

## **LAWN FLEA AND TICK CONTROL:**

To Kill Fleas and Ticks Harboring in Lawns and Backyards: For power sprayers, dilute and apply as shown in the table below. (Use this concentrate in a hose-end sprayer. Place required amount of concentrate in sprayer jar (see chart below) and fill with water to the recommended level. Mix well. Attach to sprayer and spray as recommended.) For best results, lawn must be mowed one to two (1 - 2) days before spraying. Spray using a slow, even sweeping motion, being sure to cover the entire lawn surface where the pets will normally frequent. Spray under ornamentals and trees, but avoid soaking young or flowering plants. Repeat treatments may be necessary at 7 to 14 day intervals. Esfenvalerate - PCO kills the Ixodes scapularis tick which may transmit Lyme disease. Esfenvalerate - PCO also kills foraging fire ants upon direct contact. A registered fire ant mound treatment must

also be used in conjunction with this product.

Keep pets and children out of the treated area until after the spray has dried. Do Not Spray Directly On Animals. Treat dogs and cats and their kennel or bedding area with a registered flea control product in conjunction with this application.

Amount of Product to Use Fluid Ounces	Amount of Water to Use	Area to be Treated
0.07 Fluid Ounce	3 gallons	500 sq. ft. (50' X 10')
0.14 Fluid Ounce	6 gallons	1,000 sq. ft. (50' X 20')
0.28 Fluid Ounce	12 gallons	2,000 sq. ft. (50' X 40')

### **OUTDOOR CONTROL OF ASIAN COCKROACHES:**

To control outdoor infestations of Asian cockroaches: Dilute four (4) teaspoons of Esfenvalerate - PCO in 30 gallons of water to treat 5,000 sq. ft. Repeat as needed. Keep children and pets off treated areas for 24 hours or until the grass has completely dried.

#### **STORAGE AND DISPOSAL**

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

STORAGE: Store in a warm, dry place. Keep container closed.

PESTICIDE DISPOSAL: 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.

DISPOSAL: Offer for recycling, if available, or puncture and dispose of in a sanitary landfill.

### **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 and 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. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other**

**materials or other influencing factors in the use of the product, which are beyond the control of LG Chem, Ltd. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold LG Life Sciences, Ltd. and Seller harmless for any claims relating to such factors.**

LG Chem, Ltd. 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 LG Chem, Ltd. and Buyer and User assume the risk of any such use. To the extent permitted by law, LG Chem, Ltd. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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