



## OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

March 28, 2024

Mr. Eliot Harrison  
Agent for Drexel Chemical Company  
Lewis & Harrison LLC  
2461 South Clark Street, Suite 710  
Arlington, VA 22202

Subject: Registration Review Label Amendments Incorporating Mitigation from the National Marine Fisheries (NMFS) Biological Opinion (BiOp) on the Effects of Chlorpyrifos  
Mitigation and General Updates  
Product Name: DREXEL CHLORPYRIFOS 4EC  
EPA Registration Number: 19713-517  
Application Date: March 29, 2022; August 31, 2022; June 16, 2023; February 29, 2024; and March 25, 2024  
Decision Number: 582850

Dear Eliot Harrison:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Chlorpyrifos 2022 Biological Opinion and has concluded that your submission is acceptable. 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.

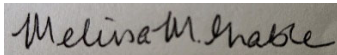
A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. The next label printing of this product must use this labeling unless subsequent changes have been approved. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 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 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 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) lists 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.

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 Melissa Grable at (202) 564-5198 or at [grable.melissa@epa.gov](mailto:grable.melissa@epa.gov).

A rectangular box containing a handwritten signature in cursive script that reads "Melissa M. Grable".

Melissa M. Grable

Team Leader, Risk Management and Implementation Branch I (RMIB I)  
Pesticide Re-Evaluation Division (PRD)  
Office of Pesticide Programs (OPP)

Enclosure

**RESTRICTED USE PESTICIDE**

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.

**ACCEPTED**  
 03/28/2024  
 Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 19713-517



**Chlorpyrifos 4EC**  
 Chlorpyrifos Insecticide

**ACTIVE INGREDIENT:**

Chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate.....44.9%

**OTHER INGREDIENTS\*:** .....55.1%

**TOTAL:** .....100.0%

\*Contains aromatic petroleum distillates.

This product contains 4 pounds of active ingredient per gallon.

**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 the label, find someone to explain it to you in detail.)

See **FIRST AID** Below

EPA Reg. No. 19713-517

EPA Est. No. 19713-XX-X

**Net Contents:**

\_\_\_\_\_ Gals. (\_\_\_\_\_) L

FIRST AID
<p><b>IF SWALLOWED:</b></p> <ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Do not give <b>any</b> liquid to the person.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<p><b>IF ON SKIN OR CLOTHING:</b></p> <ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> </ul>
<p><b>IF IN EYES:</b></p> <ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
<p><b>IF INHALED:</b></p> <ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth.</li> </ul>
<p>Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency medical treatment information.</p>
<p><b>NOTE TO PHYSICIAN:</b> Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration. Contains petroleum distillate -vomiting may cause aspiration pneumonia.</p>



Manufactured By:  
**Drexel Chemical Company**  
 P.O. Box 13327, Memphis, TN 38113-0327

**SINCE 1972**

The DREXEL logo is a registered trademark of Drexel Chemical Company.

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

**WARNING:** May be fatal if swallowed. May cause eye and skin irritation. Harmful if inhaled or if absorbed through the skin. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors or spray mist. Handle concentrate in a ventilated area.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators and other handlers must wear:** Long-sleeved shirt and long pants, chemical-resistant gloves such as Barrier Laminate or Viton  $\geq$  14 mils, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant apron when cleaning equipment, mixing, or loading. For exposures in enclosed areas use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter. For exposures outdoors, use a NIOSH approved respirator with any R, P, or HE filter.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

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.

## USER SAFETY RECOMMENDATIONS

**Users should:** 1) Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. 2) Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) 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 pesticide is toxic to birds and wildlife and extremely toxic to fish and aquatic organisms. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water when disposing of equipment washwaters.

This product is very toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are actively visiting the treatment area.

## PHYSICAL OR CHEMICAL HAZARDS

COMBUSTIBLE. Do not store or use near heat or open flame.

## 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 all "*DIRECTIONS FOR USE*" before applying. 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.

Do not apply this product through any type of irrigation system. Do not formulate this product into other end-use products.

Attention: Keep out of fish pools and other bodies of water. Do not treat vegetable gardens. Do not allow livestock to graze in treated areas. Do not feed treated grass cutting (hay) or seed screenings to livestock nor use hay for livestock bedding.

## CHLORPYRIFOS GROUP 1B INSECTICIDE

This product contains a Group 1B insecticide. Insect/mite biotypes with acquired resistance to Group 1B may eventually dominate the insect/mite population if Group 1B insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by this product or other Group 1B insecticides.

To delay development of insecticide resistance, the following are recommended:

- Avoid consecutive use of insecticides with the same mode of action (same insecticide group) on the same insect species.
- Use tank-mixtures of pre-mix products containing insecticides with different modes of action (different insecticide groups) provided the products are registered for intended use.
- Base insecticide use on comprehensive Integrated Pest Management (IPM) programs.
- Monitor treated insect populations in the field for loss of effectiveness.
- Contact your local extension specialist, certified crop advisor and/or manufacturer for insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems.

Use as a wide area/general outdoor treatment for ants and other miscellaneous pests (excludes wide-area mosquito adulticide use) is prohibited.

1. Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
2. Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
3. Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
4. Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
5. Do not apply or irrigate to the point of runoff.

### Endangered Species Protection Requirements:

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species and certain threatened species under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult <http://www.epa.gov/espp/>, call 1-844-447-3813, or email [ESPP@epa.gov](mailto:ESPP@epa.gov). You must use the Bulletin valid for the month in which you will apply the product.

Reporting Ecological Incidents: To report ecological incidents, including mortality, injury, or harm to plants and animals, call 901-774-4370.

## FOR GOLF COURSE TURF, ROAD MEDIANS, AND INDUSTRIAL PLANT SITES ONLY

Use this product to control the pests listed in the following table by applying at recommended dosages and in accordance with the directions given below. Dilute this product in water and apply as a coarse, low-pressure spray using suitable application equipment. Thoroughly water immediately after treatment to wash the insecticide into the turf, except as noted. For best results, the area should be moist at time of treatment. Spray when pests first appear; re-treat as necessary.

**Notes:** The maximum application rate for all uses listed above is 1 pound active ingredient (1 quart of formulated product) per acre. Do not allow public use of treated areas during application or until spray has dried.

Pests	Amount of This Product Per	
	1,000 Sq. Ft.	Acre
Amyrworms (such as Beet, Fall, Yellowstriped), Centipedes, Chiggers <sup>1</sup> , Chinch bugs, Crickets, Cutworms, Earwigs, Fiery skipper, Fleas, Gnats, Grasshoppers, Greenbugs, June beetles, Leafhoppers, Lucerne moths, Millipedes, Mites (such as Clover, Formula grass, Winter grain), Sod webworms <sup>2</sup> (lawn moths), Sowbugs, Springtails, Ticks <sup>1</sup>	0.75 fl. oz.	1 qt.
SPECIFIC DIRECTIONS: <sup>1</sup> Use this product for area control of labeled pests where these pests are present. Apply this product in water at the rate of 0.5 pint per acre (equivalent to 0.5 fl. oz. per 2,700 sq. ft. ) using a hydraulic sprayer, mist applicator, knapsack sprayer, or other suitable hand- or power-operated spray equipment. Treat low underbrush, grassy areas, weeds and ground surface and debris using enough spray volume to obtain thorough coverage, usually 40 to 100 gallons per acre. <sup>2</sup> For Sod webworms, delay watering and mowing the treated area for 12 to 24 hours after treatment.		
European crane flies	1 fl. oz.	1 qt.
Turfgrass weevils (Hyperodes)	1.5 fl. oz.	1 qt.
SPECIFIC DIRECTIONS: For Turfgrass weevils, spray suspected problem areas in mid-April and again in mid-May or as recommended by your Local Agricultural Extension Service specialist.		
White grubs (such as Black turfgrass ateniens, European chafers, Southern masked chafers and Japanese beetle larvae)	1.5 to 3 fl. oz.	1 qt.
SPECIFIC DIRECTIONS: Spray when Grubs are young and actively feeding near the soil surface, usually during late July and August or as recommended by your local Agricultural Extension Service specialist. Immediately after spraying, irrigate the treated area with 0.5 to 1 inch of water to wash the insecticide into the underlying soil.		
Bluegrass billbugs	0.75 to 3 fl. oz.	1 qt.
SPECIFIC DIRECTIONS: Spray early in the season when adults first appear. Re-treat as needed.		

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal. Open dumping is prohibited.

**PESTICIDE STORAGE:** Avoid storage at high temperatures. Protect from moisture. Avoid contamination with water, acids, or alkalis. Do not store near heat or open flame. Keep container closed. Store in original container in a locked storage area.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of the Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency or the hazardous waste representative at the nearest EPA Regional office for guidance.

### CONTAINER DISPOSAL:

**Nonrefillable Container (rigid material; less than 5 gal.):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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 one-fourth 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. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Nonrefillable Container (rigid material; 5 gal. or greater):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill container one-fourth 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. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Refillable Containers:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. 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. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Call 1-901-774-4370 for instructions on returning the empty container.

## WARRANTY—CONDITIONS OF SALE

The uses of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the Seller. Buyer assumes all risks of use, storage, and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable laws, in no case shall the Manufacturer or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product when such use and/ or handling is not in strict accordance with directions given herewith. To the extent consistent with applicable laws, the foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

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