



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

September 30, 2026

Oscar Perez Ovilla
Director of US/Canada Regulatory Affairs
Amvac Chemical Corporation
4695 MacArthur Court, Suite 1200
Newport Beach, CA 92660
OscarP@amvac.com

Subject: Label Amendment - Registration Review Mitigation for Dicrotophos and Bifenthrin
Product Name: BIDRIN XP II
EPA Registration Number: 5481-9024
Case Numbers: 664691 and 694870
Application Dates: July 24, 2025 and March 24, 2021

Dear Oscar Perez Ovilla:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Dicrotophos and Bifenthrin Interim Decisions, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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 Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. 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 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.

If you have any questions about this letter, please contact Patricia Biggio by phone at 202-566-1938, or via email at biggio.patricia@epa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Dana L. Friedman". The signature is written in a cursive, flowing style.

Dana L. Friedman, Chief
Risk Management and Implementation Branch 1
Pesticide Re-Evaluation Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

ENCLOSURE: Stamped label

RESTRICTED USE PESTICIDE

Due to Acute Oral, Dermal and Inhalation Toxicity; Fish and Aquatic Organism Toxicity; and Risks to Wildlife.
For retail sale to, and use only by Certified Applicators or persons under
the direct supervision of a Certified Applicator, and only for those uses covered by the Certified Applicator's
certification.

{Note to reviewer: Text in curly brackets { } indicate a note to the EPA reviewer and will not appear on the label.
Text in brackets [] is optional, and may or may not appear on the end use label. Text in parentheses () will appear
on the end use label.}

DICROTOPHOS	GROUP	1B	INSECTICIDE
BIFENTHRIN	GROUP	3A	INSECTICIDE

BIDRIN® XP II

Bidrin XP II is a broad-spectrum cotton insecticide that utilizes two active ingredients for dual mode-of-action
insect control.

ACTIVE INGREDIENTS:

Dicrotophos (Dimethyl phosphate of 3-hydroxy N,N-dimethyl-cis-crotonamide) 43.1%
Bifenthrin (2 methyl[1,1'-biphenyl-3-yl] methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)
-2,2-dimethyl-cyclopropanecarboxylate 10.8%

INERT INGREDIENTS: 46.1%

TOTAL: 100.0%

This product contains 4.0 lbs dicrotophos and 1.0 lb bifenthrin per gallon.

ACCEPTED

Sep 30, 2026

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

5481-9024

KEEP OUT OF REACH OF CHILDREN**PELIGRO**

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 to you in detail).

FIRST AID Organophosphate and Pyrethroid	
If swallowed:	• 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 by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes:	• 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.
EMERGENCY INFORMATION	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Call a physician in all cases of suspected poisoning. If warning symptoms appear, keep patient prone and quiet. Start artificial respiration immediately if patient is not breathing. Transport the patient immediately to the nearest hospital. FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY For Medical Emergencies phone:1-888-681-4261 For Transportation Emergencies, including spill, leak or fire, phone: CHEMTREC®1-800-424-9300 For Product Use Information phone: AMVAC®1-888-462-6822	
NOTE TO PHYSICIAN	
This product contains a cholinesterase inhibitor (dicotophos) and a pyrethroid (bifenthrin). Warning Symptoms: Symptoms include weakness, headache, tightness in chest, blurred vision, non-reactive pinpoint pupils, salivation, sweating, nausea, vomiting, diarrhea, and abdominal cramps. Treatment: Atropine is the specific therapeutic antagonist of choice against parasympathetic nervous stimulation. If there are signs of parasympathetic stimulation, atropine sulfate should be injected at 10-minute intervals, in doses of 1 to 2 milligrams, until complete atropinization has occurred. Pralidoxime chloride (2-PAM chloride) may also be used as an effective antidote in addition to and while maintaining full atropinization. In adults, an initial dose of 1 gram of 2-PAM should be injected, preferably as an infusion in 250cc of saline over a 15-30 minute period. If this is not practical, 2-PAM may be administered slowly by intravenous injection as a 5 percent solution in water over not less than two minutes. After about an hour, a second dose of 1 gram of 2-PAM will be indicated if muscle weakness has not been relieved. For infants and children the dose of 2-PAM is 0.25 grams. Morphine is an improper treatment. Clear chest by postural drainage. Oxygen administration may be necessary. Observe patient continuously for 48 hours. Repeated exposure to cholinesterase inhibitors may, without warning, cause prolonged susceptibility to very small doses of any cholinesterase inhibitor. Allow no further exposure until cholinesterase regeneration has been attained as determined by blood test. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided. Contains petroleum distillate. May cause an aspiration pneumonia hazard.	

See [inside] [side] [back] [panel] [booklet] [canister] [label] [attached] [to] [pouch] [bag] [seal] [pack] for [complete] [additional] [First Aid] [Precautionary Statements] [and] [Directions for Use] [and] [Storage and Disposal].

EPA Reg. No. 5481-9024

Net Contents: As Marked on Container

EPA Est. No. _____

Letter(s) in lot number correspond(s) to superscript in EPA Est. No.



AMVAC Chemical Corporation
 15440 Laguna Canyon Road, Suite 100
 Irvine, CA 92618
 1-888-462-6822



[Made with Pride in the USA]

{Note for reviewer. Below is for QR code and pointer text placeholder}

[Scan for Spanish/Escanee para español

(PLACE QR CODE HERE)]

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Fatal if swallowed. Fatal if absorbed through skin. Fatal if inhaled. Causes irreversible eye damage. Causes skin burns. Do not get in eyes, on skin, or on clothing. Do not breathe spray mist or vapor. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators and other handlers using engineering controls must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical-resistant gloves made of barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or Viton ≥ 14 mils.
- See Engineering Controls for additional requirements

In addition, mixers and loaders using engineering controls must wear:

- Chemical-resistant apron
- See Engineering Controls for additional requirements

In addition to the PPE specified above for mixers and loaders, handlers performing tasks, such as spill clean-up or equipment cleaning, for which engineering controls are not feasible, must wear:

- Coveralls
- Chemical-resistant footwear plus socks, and
- Protective eyewear
- Chemical resistant gloves made of barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or Viton ≥ 14 mils.
- Wear a minimum of a NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges and combination R or P filters; OR a NIOSH-approved gas mask with OV canisters; OR a NIOSH-approved powered air purifying respirator with OV cartridges and combination HE filters.

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.

ENGINEERING CONTROLS

Mixers and loaders must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d)], for providing dermal and inhalation protection. The system must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. At any disconnect point, the system must be equipped with a dry disconnect or dry couple shut-off device that is warranted by the manufacturer to minimize drippage to not more than 2mL per disconnect point. In addition, mixers and loaders must:

- Wear the personal protective equipment required in the PPE section for mixers/loaders using engineering controls,
- Be provided, have immediately available and must use in an emergency, such as a broken package, spill, or equipment breakdown, the following: coveralls, chemical-resistant footwear and wear a minimum of a NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges and combination R or P filters; OR a NIOSH-approved gas mask with OV canisters; OR a NIOSH-approved powered air purifying respirator with OV cartridges and combination HE filters.

Applicators using motorized ground equipment and flaggers supporting aerial application must use an enclosed cab that meets the definition in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR part 170.607(e)] for dermal protection. In addition, such applicators and flaggers must:

- Wear the personal protective equipment required in the PPE section for applicators using engineering controls,
- Either wear the type of respirator specified in the PPE section of this label or use an enclosed cab that provides at least as much respirator protection as the type of respirator specified in the PPE section of this labeling,
- Be provided, must have immediately available for use and must use in an emergency when they must exit the cab in the treated area: coveralls, chemical-resistant gloves, chemical-resistant footwear, chemical-resistant headgear, if overhead exposure, and if using an enclosed cab that provides respiratory protection, a respirator of the type specified in the PPE section of this labeling.
- Take off any PPE that was worn in the treated area before reentering the cab, and
- Store all such PPE in a chemical resistant container, such as a plastic bag, to prevent contamination of the inside of the cab.

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.607(f)].

USER SAFETY RECOMMENDATIONS

Users Should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 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 pesticide is highly toxic to fish, aquatic invertebrates, birds and mammals. Use with care when applying in areas adjacent to any body of water. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Keep out of lakes, ponds, and streams. Do not contaminate water when disposing of equipment wastewater or rinsate.

POLLINATOR HAZARD STATEMENT

This product is highly toxic to bees and other pollinating non-target insects exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.**

Do not spray border areas. Keep border areas within 25 feet of field free of bird feed and shelter. Birds feeding on treated area may be killed. Do not use whenever large flocks of birds are in the vicinity or when they are noted feeding in or around fields.

PHYSICAL OR CHEMICAL HAZARDS

Keep away from heat and open flame.

DIRECTIONS FOR USE

ENDANGERED AND THREATENED SPECIES PROTECTION REQUIREMENTS:

Before using this product, you must obtain any applicable Endangered Species Protection Bulletins ('Bulletins') within six months prior to or on the day of application. To obtain Bulletins, go to Bulletins Live! Two (BLT) at <https://www.epa.gov/pesticides/bulletins>. When using this product, you must follow all directions and restrictions contained in any applicable Bulletin(s) for the area where you are applying the product, including any restrictions on application timing if applicable. It is a violation of Federal law to use this product in a manner inconsistent with its labeling, including this labeling instruction to follow all directions and restrictions contained in any applicable Bulletin(s). For general questions or technical help, call 1-844-447-3813, or email ESPP@epa.gov.

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 allow this product to drift. The applicator also must use all other measures necessary to control drift.

REPORTING ECOLOGICAL INCIDENTS

For guidance on reporting ecological incidents, including death, injury, or harm to plants and animals, including bees and other nontarget insects, see EPA's Pesticide Incident Reporting website: <https://www.epa.gov/pesticide-incidents> or call 1-888-462-6822.

Managed pollinator protection plans are developed by states/tribes to promote communication between growers, landowners, farmers, beekeepers, pesticide users, and other pest management professionals to reduce exposure of bees to pesticides. If available, visit state plans for additional information on how to protect pollinators.

How to Report Bee Kills

It is recommended that users contact both the state lead agency and the U.S. Environmental Protection Agency to report bee kills due to pesticide application. Bee kills can be reported to EPA at beekill@epa.gov. To contact your state lead agency, see the current listing of state pesticide regulatory agencies at the National Pesticide Information Center's website: https://npic.orst.edu/reg/state_agencies.html.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 6 days.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls worn over 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.
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

Some certified crop advisors, and persons performing crop advising tasks under their direct supervision, may be exempt from certain provisions of the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR Part 170] if they meet the requirements for the crop advisor exemption listed in the WPS at 40 CFR part 170.601(b) and 170.607(g).

Resistance-Management Recommendations

For resistance management, Bidrin XP II contains both Group 1B (dicofol) and Group 3A (bifenthrin) insecticides/acaricides. Any insect/mite population may contain individuals naturally resistant to Bidrin XP II and other Group 1 or Group 3 insecticides/acaricides. The resistant individuals may dominate the insect/mite population if these insecticides/acaricides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of Bidrin XP II or other Group 1 or Group 3 insecticides/acaricides within a growing season, or among growing seasons with different groups that control the same pests.
- Use tank mixtures with insecticides/acaricides 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 insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide/acaricides 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 or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific site and pest problems in your area.
- For further information or to report suspected resistance contact AMVAC at (1-888-462-6822). You can also contact your pesticide distributor or university extension specialist to report resistance.

Advisory Best Management Practices for Pollinator Protection

The following best management practices (BMPs) can help reduce risk to pollinators:

- Develop and maintain clear communication with local beekeepers to help protect bees. To the extent possible, advise beekeepers within a 1-mile radius 48 hours in advance of the application, and confirm hive locations before spraying.
- Avoid applications during bloom.
- Avoid applications when bees are actively foraging.
- Apply pesticides in the evening or early morning hours when fewer bees are foraging.

- Using Pollinator Protection Plans when they are available. These plans may be available from state lead agencies and promote communication between growers, landowners, farmers, beekeepers, pesticide users, and other pest management professionals to reduce exposure of bees and other pollinators to pesticides.
- Use integrated pest management to prevent or mitigate potential negative effects to pollinators and consider multiple management options before resorting to a pesticide application.
- Avoiding applying pesticides to plants in bloom, including flowering weeds.

The following BMPs can help promote the health and habitat of ground-nesting bees:

- For uncultivated land, leaving large undisturbed patches of land unmowed and untilled can provide nesting and forage sites.
- For uncultivated land, mowing at the highest cutting height possible (minimum of 8-10 inches if possible) can increase and diversify food sources.

For additional resources on pollinator BMPs and Pollinator Protection Plans, visit <https://www.epa.gov/pollinator-protection/find-best-management-practices-protect-pollinators>.

APPLICATION DIRECTIONS

BIDRIN XP II contains two active ingredients, dicotophos and bifenthrin and is used for the control of damaging insects in cotton. This product is to be mixed with water and applied to cotton with aerial or ground sprayers equipped for conventional insecticide spraying.

Bidrin XP II must be used in a closed delivery system (See Engineering Controls).

CHEMIGATION

- Do not apply this product through any type of irrigation system.

PRECAUTIONS AND RESTRICTIONS

- Use of a closed handling system is required for Bidrin XP II (see Engineering Controls).
- Removable chemical extraction probes (also known as “stingers”) used in suction/extraction systems must be rinsed within the pesticide container prior to removal.
- Use this product only after cotton reaches the “First Bloom” stage of growth.
- Apply by ground or air to give uniform coverage.
- Apply in a minimum of 5 gallons per acre (gpa) of water with ground equipment or 2 gpa of water by air.
- Minimum interval between applications is 14 days.
- Do not apply more than 1.0 lb ai per acre of dicotophos from all dicotophos sources after “First Bloom” in cotton. (This includes the dicotophos in this product as well as dicotophos in Bidrin® 8 insecticide).
- The maximum number of applications of Bidrin XP II per season must be based on the maximum active ingredient allowed for the dicotophos component. For example (see Equivalent Active Ingredient Use Rates table), at the 12.8 fluid ounce/acre rate the maximum number of applications per season of Bidrin XP II is two (provided no other source of dicotophos was applied to the crop).
- Do not apply more than 0.5 lb ai/ac of bifenthrin per season. (This includes the bifenthrin in this product as well as Discipline® 2EC and other bifenthrin products).
- Do not make more than 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season. Synthetic pyrethroid products include, but are not limited to Ambush®, Asana® XL, Baythroid®, Brigade, Capture®, Danitol®, Discipline® 2EC, Fanfare, Karate®, Mustang®, Pounce®, Silencer, and Up-Cycle

- Do not apply within 30 days of harvest.
- Do not graze livestock in treated areas or cut treated crops for feed.
- Do not feed gin trash.
- Do not apply as a ULV application.

RESTRICTIONS

Aerial Applications

- Do not apply within 300 feet of areas frequented by non-occupational bystanders (especially children). These areas include residential lawns, pedestrian sidewalks, outdoor recreational areas such as school grounds, athletic fields, parks and all property associated with buildings occupied by humans for residential or commercial purposes. This includes homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, and hospitals. Buffer distances are measured from the edge of the application site to the edge of the area frequented by bystanders.

Groundboom Applications

- Do not release spray at a height greater than 2 feet above ground or crop canopy. Do not apply within 25 feet of areas frequented by non-occupational bystanders (especially children). These areas include residential lawns, pedestrian sidewalks, outdoor recreational areas such as school grounds, athletic fields, parks and all property associated with buildings occupied by humans for residential or commercial purposes. This includes homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, and hospitals. Buffer distances are measured from the edge of the application site to the edge of the area frequented by bystanders.

WATER PROTECTION STATEMENT

Do not apply during rain. Do not apply when soil in the area to be treated is saturated (if there is standing water on the field or if water can be squeezed from soil) or if NOAA/National Weather Service predicts a total rainfall of 1 inch or greater over the 48 hours following the day of application, only considering a 48-hour period when, at any point during the 48-hour period, the precipitation potential is 50% or greater. Detailed National Weather Service forecasts for local weather conditions should be obtained online at: www.weather.gov or by contacting your local National Weather Service Forecasting Office.

VEGETATIVE FILTER STRIPS

Construct and maintain a vegetative filter strip, according to the width specified below, of grass or other permanent vegetation between the field edge and nearby down gradient aquatic habitat (such as, but not limited to lakes; reservoirs; rivers; streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing bifenthrin onto fields where a maintained vegetative filter strip of at least 25 feet exists between the field edge and where a down gradient aquatic habitat exists. This minimum required width of 25 feet may be reduced or removed under the following conditions:

- For Western irrigated agriculture, a maintained vegetative filter strip of at least 10 feet wide is required. Western irrigated agriculture is defined as irrigated farmland in the following states: WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM, and TX (west of I-35).
 - For Western irrigated agriculture, if a sediment control basin is present, a vegetative filter strip is not required.
- In all other areas, a vegetative filter strip with a minimum width of 25 feet is required, unless the following conditions are met. The vegetative filter strip requirement may be reduced from 25 feet to 15 feet if at least one of the following applies:
 - The area of application is considered prime farmland (as defined in 7 CFR § 657.5).
 - Conservation tillage is being implemented on the area of application. Conservation tillage is defined as any system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage practices can include mulch-till, no-till, or strip-till.

- A functional terrace system is maintained on the area of application.
- Water and sediment control basins for the area of application are functional and maintained.
- The area of application is less than or equal to 10 acres.

For further guidance on vegetative filter strips, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. <https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0331-0175>

When tank mixing, the most restrictive of the products' labeling requirements must be followed (e.g., use prohibition, timing restriction, application method restriction, sandy soil application restriction). Check Bulletins Live Two! for additional restrictions that may be applicable for your application site. If bulletins are applicable, follow the strictest requirements between the labels and bulletins.

MANDATORY SPRAY DRIFT MANAGEMENT FOR AERIAL APPLICATION

- Do not release spray at a height greater than 10 feet above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators must select nozzle and pressure that deliver medium or coarser droplets in accordance with American Society of Agricultural & Biological Engineers Standard 641 (ASABE S641).
- During application, the Sustained Wind Speed, as defined by the National Weather Service (standard averaging period of 2 minutes) must register between 3 and 10 miles per hour.
- Wind speed and direction must be measured on location using a windsock, an anemometer (including systems to measure wind speed or velocity on an aircraft), or an aircraft smoke system.
- Wind speed must be measured at the release height or higher, in an area free from obstructions such as trees, buildings, and farm equipment.
- Applicators must use a minimum of ½ swath displacement upwind at the downwind edge of the field.
- The boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Do not apply during temperature inversions.

Spray Drift Buffer to Aquatic Habitats

- Do not apply within 300 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams or ephemeral streams when water is present, wetlands or natural ponds, estuaries, and commercial fish farm ponds) when wind is blowing toward the aquatic habitat. On-farm irrigation ditches, irrigation canals, other on-farm water conveyances, and irrigation management structures such as tailwater collection ponds are not considered aquatic habitat. Any land between the aquatic habitat and the application area can be included in the buffer (including Conservation Reserve Program (CRP) and Agricultural Conservation Easement Program (ACEP) areas).

Spray Drift Buffer to Wildlife Conservation Areas

- Do not apply within 300 feet of any conservation areas when wind is blowing toward the conservation area. Conservation areas include public lands and parks, national and state wilderness areas and wildlife refuges, national and state forests, and national and state grasslands. Any land between the conservation areas and the application area can be included in the buffer (including Conservation Reserve Program (CRP) and Agricultural Conservation Easement Program (ACEP) areas). Applications made to agricultural fields located within a conservation area are acceptable when made in accordance with an approved pesticide management plan for the conservation area and the restrictions on this label.

MANDATORY SPRAY DRIFT MANAGEMENT FOR GROUND APPLICATION

Groundboom Applications:

- During application, the Sustained Wind Speed, as defined by the National Weather Service (standard averaging period of 2 minutes), must register between 3 and 10 miles per hour.
- Wind speed and direction must be measured on location using a windsock or anemometer (including systems to measure wind speed or velocity using application equipment).
- Wind speed must be measured at the release height or higher, in an area free from obstructions such as trees, buildings, and farm equipment.
- Do not release spray at a height greater than 2 feet above the ground or crop canopy.
- Applicators must select nozzle and pressure that deliver medium or coarser droplets in accordance with American Society of Agricultural & Biological Engineers Standard 572 (ASABE S572).
- Do not apply during temperature inversions.

Spray Drift Buffer to Aquatic Habitats

- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams or ephemeral streams when water is present, wetlands or natural ponds, estuaries, and commercial fish farm ponds) when wind is blowing toward the aquatic habitat. On-farm irrigation ditches, irrigation canals, other on-farm water conveyances, and irrigation management structures such as tailwater collection ponds are not considered aquatic habitat. Any land between the aquatic habitat and the application area can be included in the buffer (including Conservation Reserve Program (CRP) and Agricultural Conservation Easement Program (ACEP) areas).

Spray Drift Buffer to Wildlife Conservation Areas

- Do not apply within 25 feet of any conservation areas when wind is blowing toward the conservation area. Conservation areas include public lands and parks, national and state wilderness areas and wildlife refuges, national and state forests, and national and state grasslands. Any land between the conservation areas and the application area can be included in the buffer (including Conservation Reserve Program (CRP) and Agricultural Conservation Easement Program (ACEP) areas).

Applications made to agricultural fields located within a conservation area are acceptable when made in accordance with an approved pesticide management plan for the conservation area and the restrictions on this label.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- **Volume** – Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** – Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle** – Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size - Aircraft

- Adjust nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

Boom Height - Ground Boom

- For ground equipment, the boom should remain level with the crop and have minimal bounce.

Release Height - Aircraft

- Higher release heights increase the potential for spray drift.

Hooded (or Shielded) Sprayers

- Shielding the boom or individual nozzles can reduce spray drift. Consider using hooded (or shielded) sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

Temperature and Humidity

- When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

Temperature Inversions

- Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

Wind

- Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.
- Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

MEASURING WIND SPEED AND WIND DIRECTION

Best Management Practices for measuring wind speed and direction of wind:

- Applicators should check and acquire the predicted wind speed and direction for the application site within 12 hours prior to conducting applications to determine the time periods wind speed is likely to fall outside the applicable thresholds.
- Applicators should reassess wind speed and direction at the application site every 15 minutes while applications are in progress.
- Measuring wind speed and direction can be done by:
 - Relying on equipment on the application equipment that measures wind speed (e.g., aerial equipment).
 - Using a tower anemometer with telemetry or handheld anemometer. Users should read user manual on how to calibrate, operate and interpret the output from an anemometer. Ground

applicators should stop every 15 minutes to take a reading with a tower anemometer with telemetry or handheld anemometer. Some anemometers may have software that would allow users to view wind measurements in real time while making an application, and in those cases, applicators would not have to stop to take measurements.

- Using a windsock. Wind can be estimated with a windsock using the stripes on a windsock. The applicator should consult the user manual for the windsock on wind speed estimation and direction of wind. Applicators should look at the sock at least every 15 minutes to estimate wind speed and direction. The windsock should be pointed in the opposite direction of the windbreak and the conservation area or aquatic habitat.
- Using an aircraft smoke system. Laying down several puffs of smoke along different lines using an aircraft smoke system can provide an accurate view of the wind speed and direction for the application.
- Checking behind the spray rig at least every 15 minutes to see if the spray has changed direction from when the application started.

Rotational Crops

Crops for which bifenthrin tolerances exist may be rotated at any time. All other crops may be rotated 30 days following the final application of Bidrin XP II.

APPLICATION INSTRUCTIONS

Rate of application is variable according to pest pressure, timing of sprays, and field scouting. Use lower specified rates under light to moderate infestations. Use higher specified rates under heavy insect pressure and for mite control. Arid climates generally require higher rates.

BIDRIN XP II USE DIRECTIONS FOR COTTON

Pests Controlled	Rate (fluid ounces/Acre)	
	Light to Moderate Infestation	Heavy Infestation
Aphid	8.0 to 10.5	12.8
Beet Armyworm		
Boll weevil		
Bollworm		
Cabbage Looper		
Carmine Spider Mite		
Cotton fleahopper		
Cotton Leafperforator		
Cutworm		
European Corn Borer		
Fall Armyworm		
Leaf footed bug		
Pink Bollworm		
Plant bug (all species)		
Stink bug (all species)		
Saltmarsh caterpillar		
Southern Garden Leafhopper		
Tobacco Budworm		
Two-spotted Spider Mite		
Whitefly		
Yellow striped armyworm		

DO NOT apply more than 12.8 fl oz/A of Bidrin XP II in a single application (0.4 lb ai dicotophos, 0.1 lb ai

bifenthrin)

EQUIVALENT ACTIVE INGREDIENT USE RATES PER ACRE

The chart below shows the amount of active ingredient of dicotophos and bifenthrin that will be delivered per acre at the various use rates:

Fluid ounces per acre of Bidrin XP II	8.000	10.500	12.800
Contains Dicrotophos (lb ai)	0.250	0.328	0.400
Contains Bifenthrin (lb ai)	0.063	0.082	0.100

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE Do not freeze or store product below 40°F. Do not store in or around the home. Store in a secure, dry and temperate area. Store in original container. Keep away from heat and open flame. If spilled, avoid exposure. If significant spill, do not attempt to clean up, call CHEMTREC (800) 424-9300. Spill can be contained by covering with a sufficient amount of absorbent (sand, soil, sawdust, etc.) to collect all liquid. Collected waste must be disposed of according to pesticide disposal below. Wear a pesticide respirator and protective clothing.

PESTICIDE DISPOSAL Pesticide wastes are acutely hazardous. Open dumping is prohibited. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. Do not pour or dispose down-the-drain or sewer. Call your local solid waste agency for local disposal options. 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 HANDLING (equal to or less 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 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. Then offer for recycling if available.

CONTAINER HANDLING (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.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; and (b) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS WARRANTY DOES NOT EXTEND TO THE USE OF THIS PRODUCT CONTRARY TO LABEL INSTRUCTIONS, OR UNDER CONDITIONS NOT REASONABLY FORESEEABLE.

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