

# 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.

# Bidrin<sup>®</sup>XP

Bidrin XP is a broad-spectrum cotton insecticide that utilizes two active ingredients for dual mode-of-action insect control. This co-pack contains 1 gallon of dicotophos insecticide and 1 gallon of bifenthrin insecticide/miticide. Do not use either component separately.

### ACTIVE INGREDIENT:

Dicotophos (Dimethyl phosphate of 3-hydroxy N,N-dimethyl-cis-crotonamide)..... 82.0%  
**INERT INGREDIENTS:**..... 18.0%  
**TOTAL**.....100.0%  
Contains 8 lbs. dicotophos per gallon.

### ACTIVE INGREDIENT:

Bifenthrin (2 methyl[1,1'-biphenyl]-3-yl) methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-cyclopropanecarboxylate\*..... 25.1%  
**INERT INGREDIENTS\*\*:**.....74.9%  
**TOTAL**.....100.0%  
Contains petroleum distillate

\*Cis isomers 97% minimum, trans isomers 3% maximum.

\*\*Contains xylene range aromatic solvents.

This product contains 2 pounds bifenthrin per gallon.

## KEEP OUT OF REACH OF CHILDREN



### DANGER - PELIGRO POISON



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	
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Do not give any liquid to the person.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled:</b>	<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, preferable by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
EMERGENCY INFORMATION	
<p>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.</p> <p>FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:            Transportation: CHEMTREC.....1-800-424-9300            Other: AMVAC.....1-323-264-3910</p>	

### NOTE TO PHYSICIAN

This product contains a cholinesterase inhibitor (dicotophos) and a pyrethroid (bifenthrin).

#### Dicotophos:

**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.

#### Bifenthrin:

**Treatment:** 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 - vomiting may cause aspiration pneumonia.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** Fatal if swallowed. May be fatal if absorbed through skin or if inhaled. Causes moderate eye irritation. Do not get in eyes, on skin, or on clothing. Do not breathe spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are: barrier laminate, nitrile rubber, neoprene rubber, or viton. If you want more options, follow the instructions for category E on an EPA chemical-resistance category selection chart.

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

- Long-sleeve shirt and long pants
- Shoes plus socks
- See Engineering Controls for additional requirements

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

- Chemical-resistant gloves
- 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
- A respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, or HE prefilter.

EPA Reg. No. 5481-552

EPA Est. No. 5481-AL-1

Net Contents: As Marked on Container



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## 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 of Bidrin XP must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], 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 2 mL 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,
- Wear protective eyewear if the system operates under pressure, and
- 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 a respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, or HE prefilter.

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 170.240(d)(5)] 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.

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 170.240(d)(6)].

## 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.

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

Do not spray border areas. Keep border areas within 25 feet of field 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.

The use of Bidrin XP is prohibited in areas that may result in exposure of endangered species to Bidrin XP. Prior to use in a particular county contact the local extension service for procedures and precautions to use to protect endangered species.

## PHYSICAL OR CHEMICAL HAZARDS

Keep away from heat and open flame.

## DIRECTIONS FOR USE

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

**Pest Resistance:** Pests have demonstrated the ability to develop resistance to continual use of the same product or to products with a similar mode of action. In order to avoid conditions which favor development of pest resistance, follow established resistance management guidelines in your geography as recommended by state agricultural extension personnel and crop consultants. If product performance diminishes and pest resistance is suspected to have developed in your geography, and specifically on your crop, repeated use of this product may not adequately control the target pest. As soon as practical, contact your local crop consultant, agricultural advisor, or company representative to obtain information on alternative pest management strategies in your geography.

## 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-sleeve shirt and long pants
- Chemical resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks, and
- 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 170.104(b) and 170.204(b).

## GENERAL DIRECTIONS

BIDRIN XP contains one gallon of dicofol insecticide and one gallon of bifenthrin insecticide/miticide packaged in a divided but fused container for the control of damaging insects in cotton. The two products should be mixed with water and applied to cotton with aerial or ground sprayers equipped for conventional insecticide spraying. **The two products must be used together and mixed with water.**

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

## CHEMIGATION

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

**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.

**APPLICATION INSTRUCTIONS**

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

Cultivation within 10 feet of a water body is prohibited to allow for the growth of a vegetated filter strip.

**SPRAY DRIFT PRECAUTIONS**

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

Do not apply by ground equipment within 25 feet, or by air within 150 feet of lakes; reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or rotor diameter.

Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.

Spray should be released at the lowest height consistent with pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

Make aerial or ground applications when the wind velocity favors on target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.

Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Do not cultivate within 10 feet of the aquatic area so as to allow growth of a vegetative filter strip.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.

Do not make aerial or ground applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

**BIDRIN XP USE DIRECTIONS FOR COTTON**

Pests Controlled	Acres Treated Per Container <sup>1</sup>	
	Light to Moderate Infestation	Heavy Infestation
Aphid Beet Armyworm Boll Weevil Bollworm Cabbage Looper Carmine Spider Mite Cotton Fleahopper Cotton Leafperforator Cutworm European Corn Borer Fall Armyworm Leaf Footed Bug	32 acres	20 acres

**BIDRIN XP USE DIRECTIONS FOR COTTON (CONTINUED)**

Pink Bollworm	32 acres	20 acres
Plant Bug (all species)		
Stink Bug (all species)		
Saltmarsh Caterpillar		
Southern Garden Leafhopper		
Tobacco Budworm		
Two-spotted Spider Mite		
Whitefly		
Yellow Striped Armyworm		

<sup>1</sup>A container is defined as the fused jug containing one gallon of dicrotophos (8 lbs. a.i./gal) and one gallon of bifenthrin (2 lbs. a.i./gal)

**ACRES TREATED AND EQUIVALENT COMPONENT USE RATES PER BIDRIN XP CONTAINER**

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

Acres Per Container:	32	28	24	20
Dicrotophos (lb ai)	0.250	0.286	0.333	0.400
Bifenthrin (lb ai)	0.063	0.071	0.083	0.100

**APPLICATION RESTRICTIONS:**

Use of a closed handling system is required for both components of Bidrin XP (see Engineering Controls).

Always add bifenthrin to the mix tank first, then add dicrotophos.

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. a.i./ac of dicrotophos from all dicrotophos sources after "First Bloom" in cotton. (This includes the dicrotophos in this product as well as dicrotophos in Bidrin® 8 insecticide).

The maximum number of applications of Bidrin XP per season must be based on the maximum active ingredient allowed for the dicrotophos component (see chart above) For example, at the 20 acre rate the maximum number of applications of Bidrin XP is two (provided no other source of dicrotophos was applied to the crop).

Do not apply more than 0.5 lb. a.i./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®, Ammo®, Asana® XL, Baythroid®, Capture®, Danitol®, Discipline® 2EC, Karate®, Mustang®, Pounce® and Scout X-TRA®.

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.

**STORAGE AND DISPOSAL**

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

#### STORAGE AND DISPOSAL (CONTINUED)

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. 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:** Do not reuse empty container. Triple rinse (or equivalent). Then dispose of in a sanitary landfill or by other approved State and local procedures.

#### LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use, subject to the inherent risks referred to herein, when it is used in accordance with such directions; and (c) 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.

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