

RESTRICTED USE PESTICIDE

Due to Acute Human, Avian and Aquatic Invertebrate Toxicity

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.

GROUP	1B	3	INSECTICIDE
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INDEX[®]
LIQUID AT-PLANT INSECTICIDE

FOR USE ON CORN ONLY

TO CONTROL CORN ROOTWORM LARVAE, WIREWORM, CUTWORM, SEEDCORN MAGGOT, WHITE GRUB, GRAPE COLASPIS, SUGARCANE BEETLE, AND SYMPHYLAN ON FIELD CORN, SEED CORN, SWEET CORN, AND POPCORN.

ENGINEERING CONTROLS- Closed System Loading and Mixing and Enclosed Tractor Cab Required

ACTIVE INGREDIENT: (% by weight)

Chlorethoxyfos: Phosphorothioic acid, O,O-diethyl O-(1,2,2,2-tetrachloroethyl)ester 25.8%

Bifenthrin: (2-methyl [1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-
2,2-dimethylcyclo-propanecarboxylate 4.2%

INERT INGREDIENTS: 70.0%

TOTAL: 100.0%

This product contains 2.8 pounds active ingredient per gallon.
Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN

 **DANGER-POISON-PELIGRO** 

This label must be in the possession of the user at the time of application.
See other panels for additional precautionary information.

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.)

EPA Reg. No. **5481-587**

EPA Est. No.

Made in U.S.A.

Net Weight: _____

As Marked on Container



AMVAC Chemical Corporation
4695 MacArthur Court, Suite 1200
Newport Beach, CA 92660 U.S.A.

{Note to Reviewer: The First Aid box will appear on the front panel of the label.}

FIRST AID	
If on skin or clothing	<ul style="list-style-type: none"> • 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 inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth to mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
EMERGENCY INFORMATION	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p>FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:</p> <p>For Medical Emergencies phone:1-888-681-4261</p> <p>For Transportation Emergencies, including spill, leak or fire, phone: CHEMTREC®1-800-424-9300</p> <p>For Product Use Information phone: AMVAC®1-888-462-6822</p>	
NOTE TO PHYSICIAN	
<p style="text-align: center;">Contains an Organophosphate which inhibits cholinesterase and a Pyrethroid</p> <p>ATROPINE IS THE EMERGENCY ANTIDOTE FOR INDEX LIQUID AT-PLANT INSECTICIDE POISONING. 2-PAM IS ALSO ANTIDOTAL AND MAY BE USED IN CONJUNCTION WITH ATROPINE.</p> <p>Warning Symptoms</p> <p>INDEX LIQUID AT-PLANT INSECTICIDE is an organophosphate insecticide containing a pyrethroid and is a cholinesterase inhibitor. Overexposure to this product may cause toxic signs and symptoms due to stimulation of the cholinergic nervous system.</p> <p>Symptoms of poisoning may include weakness, headache, tightness in chest, blurred vision, non-reactive pin-point pupils, salivation, sweating, nausea, vomiting, diarrhea, muscle tremors and abdominal cramps. In severe cases, convulsions, unconsciousness and respiratory failure may occur.</p> <p>Treatment</p> <p>Atropine is the specific therapeutic antagonist of choice against this type of parasympathetic nervous stimulation. If warning symptoms appear, treatment should consist of parenteral atropine sulfate. This can be administered intramuscularly every 10 minutes until full atropinization (as indicated by dilated pupils, dry flushed skin and tachycardia) has been achieved and repeated thereafter whenever symptoms reappear. For infants and children, the dose of atropine sulfate is 0.05 mg/kg. For adults, 1 to 2 milligrams will be required for mild cases, but up to 4 mg may be needed for severe intoxication. 20 to 30 milligrams or more may be required during the first 24 hours.</p> <p>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 250 cc of saline over a 15- to 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</p>	

FIRST AID

and children, the dose of 2-PAM is 20-50 mg/kg. 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. Reversible skin sensations (paresthesia) may occur and ordinary skin salves have been found useful in reducing discomfort.

For medical emergencies involving this product, call 1-888-681-4261.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Fatal if absorbed through the skin or inhaled. May be fatal if swallowed. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear coveralls worn over long-sleeved shirt and long pants, socks, chemical-resistant footwear, and chemical-resistant gloves made of barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, polyethylene, polyvinyl chloride (PVC) \geq 14 mils, or Viton \geq 14 mils. Remove and wash contaminated clothing before reuse. For handling activities, wear a minimum of an elastomeric half face NIOSH approved respirator with organic vapor (OV) cartridges and a combination R or P filter (TC-84A)." When mixing or loading wear a chemical resistant apron.

Keep Out of Reach of Domestic Animals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Materials that are chemical-resistant to this product are barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, polyethylene, polyvinyl chloride (PVC) \geq 14 mils, or Viton \geq 14 mils. Loaders and applicators using the closed loading/application system and an enclosed-cab for application must wear:

- Long-sleeved shirt and long pants, and
- Chemical-resistant footwear plus socks, and
- Chemical-resistant gloves made of barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, polyethylene, polyvinyl chloride (PVC) \geq 14 mils, or Viton[®] \geq 14 mils.
- Chemical resistant apron when mixing and loading
- Handlers engaged in activities such as cleaning up a spill or leak and cleaning or repairing contaminated equipment, must wear:
 - Chemical-resistant coveralls over long sleeved shirt and long pants
 - Chemical-resistant gloves made of barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, polyethylene, polyvinyl chloride (PVC) \geq 14 mils, or Viton \geq 14 mils.
 - Chemical-resistant apron
 - Chemical-resistant footwear plus socks
 - Wear a minimum of an elastomeric half face NIOSH approved respirator with organic vapor (OV) cartridges and a combination R or P filter (TC-84A); OR a NIOSH approved gas mask with an OV canister; OR a NIOSH approved powered air purifying respirator with an OV cartridge and a combination HE filter.

See Engineering Controls for additional requirements.

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

Engineering Controls for Loaders:

This product must be applied in a closed loading system that meets the definition in the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection. Loaders must:

- wear the personal protective equipment required in the PPE section of this labeling for loaders, and in addition to wearing the required PPE, must have immediately available and use in case of emergency (such as a broken package, spill, or equipment breakdown):
 - Wear a minimum of an elastomeric half face NIOSH approved respirator with organic vapor (OV) cartridges and a combination R or P filter (TC-84A); OR a NIOSH approved gas mask with an OV canister; OR a NIOSH approved powered air purifying respirator with an OV cartridge and a combination HE filter.
 - The PPE specified in the PPE section of this labeling for spill clean-up.

Engineering Controls for Applicators

Applicators must use a tractor with an enclosed cab that meets the definition in the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, applicators must:

- wear the PPE required in the PPE section of this product labeling for applicators using engineering controls,
- be provided, must have immediately available, and must wear in an emergency, when they must exit the cab in the treated area, the PPE specified in the PPE section of this labeling for spill clean-up,
- 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.

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 body 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 toxic to wild mammals, birds, fish, and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

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.

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, and notification to workers. 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 48 hours. The REI is 72 hours where average rainfall is less than 25 inches per year.

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard under certain circumstances, allows workers to enter the treated area without restrictions if there will be no contact with anything that has been treated.

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 over long-sleeved shirt and long pants,
- Chemical-resistant gloves made of barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, polyethylene, polyvinyl chloride (PVC) \geq 14 mils, or Viton \geq 14 mils.
- Chemical resistant footwear plus socks,
- Protective eye wear

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

For any requirements specific to your State, consult the agency responsible for pesticide regulation.

CROP USE INFORMATION

INDEX LIQUID AT-PLANT INSECTICIDE is a liquid soil insecticide for use on corn (field corn, seed corn, sweet corn and popcorn) at planting for the control of western, northern, and southern corn rootworm; wireworm, cutworm, seedcorn maggot, white grub, sugarcane beetle, grape colaspis and symphylan.

Herbicide Compatibility Information

All registered corn herbicides may be applied to corn which will be treated or has been treated with INDEX LIQUID AT-PLANT INSECTICIDE. INDEX LIQUID AT-PLANT INSECTICIDE is not systemic and will not interact with soil applied or postemergence corn herbicides.

APPLICATION INSTRUCTIONS

FIELD CORN, SEED CORN, SWEET CORN, POPCORN		
Pest	Rate (Fluid ounces per 1000 feet of row)	Crop Rotational Intervals
Cutworm White Grub Wireworm Seedcorn Maggot Grape Colaspis Symphylan	0.44 to 0.72	Corn: Anytime Other crops: 30 days
Western Corn Rootworm Northern Corn Rootworm Southern Corn Rootworm Sugarcane Beetle	0.65 to 0.72	
RESTRICTIONS:		
<ul style="list-style-type: none"> Do not make more than one application per year. 		

Application

INDEX LIQUID AT-PLANT INSECTICIDE must be applied in-furrow at planting for optimum control of labeled pests. DO NOT apply using any other placement, including T-band and banded applications.

At Planting In-Furrow Treatment

Apply INDEX LIQUID AT-PLANT INSECTICIDE Insecticide at planting time as an in-furrow treatment for control of corn rootworm larvae, wireworm, cutworm, seedcorn maggot, white grub, sugarcane beetle, grape colaspis and symphylan. Liquid in-furrow applications are to be applied into the seed furrow at planting, through microtubes or spray nozzles directed into the seed furrow, behind the planter furrow openers and in front of the press wheels such that product is completely covered with soil.

Dilute Application Directions:

Liquid in-furrow applications are recommended using water as a carrier in a minimum application volume of 2 gallons per acre. Apply INDEX LIQUID AT-PLANT INSECTICIDE in a volume of water which will ensure uniform placement in the furrow for best control of soil pests.

Determining the Amount of INDEX LIQUID AT-PLANT INSECTICIDE per Acre

To determine the approximate amount of INDEX LIQUID AT-PLANT INSECTICIDE needed per acre, select the rate in fluid ounces per 1,000 row feet and the row spacing as shown in the following chart:

Amount of INDEX LIQUID AT-PLANT INSECTICIDE per 1,000 feet of row (fluid ounces):	Corn row spacing (inches)							
	15	20	22	30	30 (twin row)	34	36	40
	Fluid Ounces per Acre of INDEX LIQUID AT-PLANT INSECTICIDE							
0.44	15.3	11.5	10.5	7.7	15.3	6.8	6.4	5.8
0.51	17.8	13.3	12.1	8.9	17.8	7.8	7.4	6.7
0.65	Not Labeled	17.0	15.4	11.3	Not Labeled	10.0	9.4	8.5
0.72	Not Labeled	18.8	17.1	12.5	Not Labeled	11.1	10.5	9.4

STORAGE AND DISPOSAL

Pesticide Storage : Do not freeze or store product below 40°F.

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call Chemtrec: 1-800-424-9300

To confine spill: Dike surrounding area or absorb with sand, cat litter or commercial clay. Place damaged package in a holding container. Identify contents.

Pesticide Disposal: Pesticide wastes are toxic. 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 of the nearest EPA Regional Office for guidance.

Container Handling

Nonrefillable container. Do not reuse or refill this container.

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. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

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. THIS WARRANTY DOES NOT EXTEND TO THE USE OF THIS PRODUCT CONTRARY TO LABEL INSTRUCTIONS, OR UNDER CONDITIONS NOT REASONABLY FORESEEABLE.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH HEREIN. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE, TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS, ALL IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF QUALITY OR PERFORMANCE. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

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SPECIMEN