

**ACCEPTED**

LICENSE NO. **9521.47**

## 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



**LOCK'N LOAD®**

**GRANULAR INSECTICIDE**  
*For Use On Corn Only*

ACTIVE INGREDIENT:	(% by weight)
Chlorethoxyfos:	
Phosphorothioic acid, O,O-diethyl O- (1,2,2,2-tetrachloroethyl)ester .....	4.3%
Bifenthrin:	
(2-methyl [1,1'-biphenyl]-3-yl)methyl 3- (2-chloro-3,3,3-trifluoro-1-propenyl)- 2,2-dimethylcyclo-propanecarboxylate .....	0.7%
<b>INERT INGREDIENTS:</b> .....	95.0%
<b>TOTAL:</b> .....	100.0%

**KEEP OUT OF REACH OF CHILDREN**  
**DANGER**  **PELIGRO**  
**POISON**

SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY  
STATEMENTS, STORAGE AND DISPOSAL AND DIRECTIONS FOR USE.

EPA Reg. No. 5481-561

EPA Est. No. 5481-AL-1

NET WEIGHT: 40 LBS.



4100 E. Washington Blvd. • Los Angeles, CA 90023 U.S.A  
1-888-462-6822

12788-3

## FIRST AID

<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</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, preferably 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

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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

### Organophosphate and Pyrethroid

ATROPINE IS THE EMERGENCY ANTIDOTE FOR SMARTCHOICE® INSECTICIDE POISONING. 2-PAM IS ALSO ANTIDOTAL AND MAY BE USED IN CONJUNCTION WITH ATROPINE.

#### **Warning Symptoms**

SMARTCHOICE 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.

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.

Continued

#### **Treatment**

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.

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 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 (parasthesia) may occur and ordinary skin salves have been found useful in reducing discomfort.

For medical emergencies involving this product, call 1-888-462-6822.

## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**DANGER:** Fatal if swallowed. May be fatal if inhaled. Causes moderate eye irritation. Harmful if absorbed through the skin. Do not breathe dust. Avoid contact with skin, eyes, or clothing. Wear a mask or pesticide respirator jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health. Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Repeated exposure can lead to an asymptomatic increase in the susceptibility to poisoning. Avoid prolonged exposure to the product.

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Loaders, applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (except for applicators) such as barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, natural rubber  $\geq 14$  mils, Polyvinyl Chloride (PVC)  $\geq 14$  mils, or Viton  $\geq 14$  mils

### **User Safety Requirements**

Follow manufacturer's instructions for cleaning/maintaining PPE. All washable PPE should be washed in detergent and hot water prior to reuse. Keep and wash PPE separately from other laundry.

### **ENGINEERING CONTROLS**

**IMPORTANT:** The LOCK 'N LOAD® system when used correctly qualifies as a closed loading system under the WPS. Loaders using the LOCK 'N LOAD system must:

- Wear the PPE specified above for loaders
- In addition to wearing the required PPE, have immediately available for use in case of an emergency
- Chemical-resistant apron
- Chemical-resistant footwear, and
- NIOSH-approved respirator with an organic-vapor (OV) cartridge or canister with any N, R, P, or HE prefilter.

Applicators must be in enclosed cabs and must:

- Wear the PPE specified above for applicators
- In addition to wearing the required PPE, have available for use coveralls, chemical-resistant gloves, and protective eyewear if it is necessary to exit the cab and contact pesticide-treated surfaces in the treated area
- Remove PPE that was worn in the treated area before reentering the cab, and
- Store all 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.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of the 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. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

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### **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.

#### 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 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 if there will be no contact with anything that has been treated.

**Double Notification:** Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas. 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
- Chemical-resistant gloves such as barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, natural rubber  $\geq 14$  mils, Polyvinyl Chloride (PVC)  $\geq 14$  mils, or Viton  $\geq 14$  mils
- Shoes plus socks.

IMPORTANT: Apply this product only as specified on this label. Do not apply this product through any type of irrigation system.

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#### GENERAL INFORMATION

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SMARTCHOICE® 5G is a granular soil insecticide for use on corn (field, sweet, popcorn and seed) at planting for the control of northern, western and southern corn rootworm larvae, wireworms, cutworms, seedcorn maggots, white grubs, grape colaspis and symphylans.

##### **Herbicide Compatibility Information**

- All registered corn herbicides may be applied to SMARTCHOICE-treated corn.

### Application Instructions

Crop	Pest	Dosage and Comments
Field Corn Seed Corn Sweet Corn Popcorn	Cutworms Wireworms White Grubs Seedcorn Maggots Grape Colaspis Symphylans  Corn Rootworm Larvae* Northern Western Southern	3.0 to 3.5 ounces per 1,000 feet of row          *Aids in the control of corn rootworm larvae when used in combination with corn hybrids containing in-plant protection against corn rootworm larvae
	Corn Rootworm Larvae Northern Western Southern  Cutworms Wireworms White Grubs Seedcorn Maggots Grape Colaspis Symphylans	4.5 to 5.0 ounces per 1,000 feet of row
<p><b>Restrictions:</b> Do not make more than one application per year.</p> <p><b>Crop Rotational Intervals</b></p> Corn.....Anytime Other crops.....30 days		

#### Application

SMARTCHOICE® 5G should be applied in-furrow at planting for optimum control of labeled pests. DO NOT apply as a surface band behind the press wheel.

***In-Furrow Application at Planting:***

Apply SMARTCHOICE® 5G in conventional, conservation or no-till corn as an in-furrow treatment. Place the applicator tube either directly into or behind the planter shoe, so the granules drop into the open seed furrow and are completely covered with soil. In-furrow application provides optimum control of corn rootworms, wireworms, white grubs, seedcorn maggots, and grape colaspis.

***Further Application Information:***

- Under windy conditions the use of wind shields is recommended to ensure proper placement of granules.
- The LOCK 'N LOAD® system must be properly calibrated to assure an accurate application rate of SMARTCHOICE 5G.
- SMARTCHOICE 5G is non-corrosive to equipment and is nonflammable.

***Determining the Amount of SMARTCHOICE 5G per Acre***

To determine the approximate amount of SMARTCHOICE 5G needed per acre, select the use rate per 1,000 row feed and the row spacing as shown in the following chart:

Amount of SMARTCHOICE per 1,000 feet of row	Pounds of SMARTCHOICE 5G Required per Acre at Various Row Spacings						
	15" or twin row	20 in	22 in	30 in	34 in	36 in	40 in
3.0 oz.	6.5	4.9	4.5	3.3	2.9	2.8	2.6
3.5 oz.	7.6	5.7	5.2	3.8	3.4	3.2	3.0
4.5 oz.	9.8	7.3	6.7	4.9	4.3	4.1	3.9
5.0 oz.	10.9	8.2	7.4	5.4	4.8	4.5	4.3

***SMARTCHOICE 5G CALIBRATION GUIDELINES***

The following **equipment calibration procedures** must be performed to ensure that the proper amount of SMARTCHOICE 5G will be applied:

1. Fill insecticide hoppers with SMARTCHOICE 5G using LOCK 'N LOAD containers.
2. Attach a collection container to each tube opening to catch the insecticide.
3. Set your planter to the initial gauge settings shown in the chart.
4. Measure off 250 ft of row and drive planter, while metering the insecticide, the premeasured distance at the speed at which you will be planting.
5. The target catch weight for each container is 0.88 and 1.25 oz of granules for the rates of 3.5 oz and 5.0 oz per 1000 ft, respectively, when collected for 250 ft of row. Determine the amount caught in each row either by weight or by volumetric approximation of weight.
6. Repeat the calibration procedure above, as needed, until the insecticide caught in each container is as close as possible to the target amount.

<b>Planting Speed MPH</b>	<b>4</b>		<b>5</b>		<b>6</b>		<b>7</b>		<b>8</b>	
<b>Application Rate (oz per 1000 row ft)</b>	3.5	5.0	3.5	5.0	3.5	5.0	3.5	5.0	3.5	5.0
<b>Planter / Metering System</b>										
Case International Harvester (One guage per hopper; Gate/Dial) - Older	1/5	1/7	1/7	1/9	1/8	2/1	1/9	2/3	2/1	2/5
Case International Harvester (Two guages per hopper; Gate/Dial) - Newer	1/1	1/3	1/3	1/5	1/4	1/6	1/5	1/7	1/6	1/9
John Deere® MaxEmerge® 2 (Models 7200/7300) & 1760 Conservation Planter	12	15	14	17	16	20	18	24	20	27
John Deere 7000 MaxEmerge (Even) (0-10-20-30-40)	8	11	10	13	11	14	13	16	15	18
John Deere 7000 MaxEmerge (Odd) (5-15-25-35-45)	7	9	9	11	11	13	13	15	14	16
John Deere MaxEmerge Plus	11	14	13	16	15	19	17	23	19	26
Kinze® (2600 Series & Newer)	7	10	9	12	10	13	12	15	14	17
White® (5100 Series)	7	8	8	9	9	11	10	12	12	14
White (6100 Series)	8	10	10	12	12	14	13	15	15	17

NOTE: These settings should be used as **starting points only**. Follow manufacturers recommendations for calibration of the specific equipment you are using or the calibration guidelines above to make final adjustments. After initial calibration, recheck flow rate occasionally to make sure equipment wear, changing conditions, etc. have not caused a change in flow rate.

#### **Resistance**

Some insects are known to develop resistance to products used repeatedly for control. When this occurs, the recommended dosages fail to suppress the pest population below the economic threshold. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of active classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local agricultural authorities for details.

#### **Integrated Pest Management**

AMVAC recommends the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

## **STORAGE AND DISPOSAL**

**STORAGE:** Store in a secure, locked, dry and temperate area where children, unauthorized persons or animals cannot enter. Keep the container capped when not in use. Do not transport or store near food or feed intended for human or animal consumption. Do not use or store in or around the home. Do not contaminate water, other pesticides, fertilizer, food or feed by storage or disposal.

**PRODUCT DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or container is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions contact our State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** DO NOT DISCARD THE CONTAINER. Do not attempt to open or tamper with the container. Completely empty container into application equipment. Return empty container to point of purchase or call 1-888-GO-AMVAC for instructions. Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

## **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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