



#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (H7505C) 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

	EPA Reg. Number:	Date of I	issuanc	e:
	5481-560	OCT	30	2008
	Term of Issuance:			
	Conditional			
1				

Smartchoice 2.5G

# NOTICE OF PESTICIDE:

X Registration
Reregistration

(Under FIFRA as amended)

Name and Address of Registrant (include ZIP Code):

AMVAC Chemical Corporation

4695 MacArthur Court, Suite 1250

Newport Beach, CA 92660

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is **conditionally** registered in accordance with FIFRA sec. 3(c)(7)(A), provided that:

- 1. You will submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
- 2. You will make the following label changes before you release the product for shipment:
  - a) Revise the EPA Registration Number to read "EPA Reg. No. 5481-560."
  - b) On page 4 revise the table heading "<u>Recommended Applications</u>" to read "Application Instructions".
  - c) Place the statement "Do not make more than one application per year" and the "Crop rotational intervals" information under the comments section of the application table, or as a "Restrictions" note at the end of the table.
  - d) Revise "Smartchoice should be applied with a graular..." to read "Apply Smartchoice with a granular ..."
  - e) Revise the table on page 5 by correcting the pounds of product required per acre at the various row spacings. Note that the maximum application rate for chlorethoxyfos is 0.1625 lb ai/Acre.
  - f) Revise the last sentence of the warranty and disclaimer statements, "To the fullest extent permitted by law" to read "To the extent consistent with applicable law", as in other statements in the section.

- 3. Data requirements for the 830 Series Subgroup A and Subgroup B Guidelines are satisfied with the exception of storage stability (830.6317) and corrosion characteristics data (830.6320). One year storage stability and corrosion characteristics data must be submitted to the Agency. Refer to the enclosed Product chemistry review memo for details concerning the requested data.
- 4. Revise the product data matrix by including a new page for each active ingredient and identifying submitted/cited data and all applicable submitters. Refer to PR Notice 98-5 for details.
- 5. Please submit two (2) copies of your final printed labeling and revised data matrix before releasing the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing revised labeling constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

If you have questions regarding this action, please contact Olga Odiott at (703) 308-9369.

Signature of Approving Official:
DIK OLIM AN
Kimberly Nesci, Interim Product Manager (13)
Insecticide Branch/Registration Division (7505P

Enclosure

OCT 3 0 2008

Date:

#### 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.

# **SMARTCHOICE**<sup>TM</sup> **2.5G**

# granular insecticide

FOR USE ON CORN ONLY

TO CONTROL CORN ROOTWORM LARVAE, WIREWORMS, CUTWORMS, SEEDCORN MAGGOTS, WHITE GRUBS, GRAPE COLASPIS AND SYMPHYLANS ON FIELD CORN, SEEDCORN, SWEET CORN, AND POPCORN.

ACTIVE INGREDIENT	f: (% by weight)					
Chlorethoxyfos:						
Phosphorothioic a	acid, O,O-diethyl O-(1,2,2,2-tetrachloroethyl)ester	2.15%				
Bifenthrin:	·					
	iphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-	0.070				
	p-propanecarboxylate					
	<u>:</u>					
TOTAL:	OTONI DEL DI LA DEL DEPODE LICE					
•	STOP! READ LABEL BEFORE USE KEEP OUT OF REACH OF CHILDREN	6 0 6				
	WARNING AVISO	6 6 6 6 6 6 6 6				
Si netod	no entiende le etiquete husque e elquien pero que se la evalique a ustad en deight (	6 6 6 6 6 6				
. Si usieu i	no entiende la etiqueta, busque a alguien para que se la explique a usted en deialige o you do not understand this label, find someone to explain it to you in detail.)	Ç.				
	FIRST AID	6000				
	Organophosphate and Pyrethroid	6000-				
	· Call a poison control center or doctor immediately for treatment advice	e. oc.				
	Have person sip a glass of water if able to swallow.					
If swallowed:	Do not induce vomiting unless told to do so by the poison control	ol center or				
doctor.						
	• Do not give anything by mouth to an unconscious person.					
	• Move person to fresh air.					
If inhaled:	If person is not breathing, call 911 or an ambulance, then g	ive artificial				
respiration, preferably by mouth-to-mouth, if possible.						
	• Call a poison control center or doctor for further treatment advice.					
	• Take off contaminated clothing.					
If on skin or clothing:	•Rinse skin immediately with plenty of water for 15-20 minutes.					
	• Call a poison control center or doctor for treatment advice.					
	·Hold eye open and rinse slowly and gently with water for 15-20 minu	tes.				
Ter	Remove contact lenses, if present, after the first 5 minutes, then con					
If in eyes:	eye.					
	·Call a poison control center or doctor for treatment advice.					
SEE SIDE/BACK PANEL F	OR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS	FOR USE.				
EPA Reg. No. 5481	Net Weigh	nt: 50 LBS.				
EPA Est. No.	ACC with CC	EPTED DMMENTS				

4100 E. Washington Blvd.

4100 E. Washington BIVd.

Fungicide, and Rodenticide Act.

Los Angeles, CA 90023 U.S.A 1-323-264-3910 • www.amvac-chemnoshden for the pesticide

# FIRST AID (Cont.)

Organophosphate and Pyrethroid

#### **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:

#### NOTE TO PHYSICIAN

This product is an organophosphate insecticide. ATROPINE IS THE EMERGENCY ANTIDOTE FOR INSECTICIDE POISONING. 2–PAM is also antidotal and may be used in conjunction with atropine.

#### WARNING SYMPTOMS

SMARTCHOICE 2.5G 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.

#### 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 1–323–264–3910.

#### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

WARNING: Harmful if absorbed through the skin. Causes moderate eye irritation. 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. 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 ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, Polyvinyl Chloride (PVC) ≥14 mils, or Viton >14 mils

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• Loaders must also wear 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 (OV) cartridge, or a canister with with any N, R, P or HE prefilter.

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.

#### **Engineering Controls**

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.
- 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 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. Apply this product only as specified on this label.

Granules lying on the soil surface at loading areas and in turning areas at row ends must be incorporated into the top one-inch of soil using suitable incorporation equipment to remove the possible hazard to birds and other wildlife.

#### **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 ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, Polyvinyl Chloride (PVC) ≥14 mils, or Viton ≥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.

When emptying bags, pour downwind and allow the minimum of free fall of granules. Do not pour at face level and do not allow dust to reach the breathing zone.

#### **GENERAL INFORMATION**

SMARTCHOICE 2.5G 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 2.5G-treated corn.

**Recommended Applications** 

Crop	Pest	Dosage and Comments
Field Corn	Cutworms	6.0 to 7.0 ounces per 1,000 feet of
Seed Corn	Wireworms	row
Sweet Corn	White Grubs	
Popcorn	Seedcorn Maggots	
	Grape Colaspis	
	Symphylans	·
	j.	
	Corn Rootworm Larvae*	*Aids in the control of corn
	Northern	rootworm larvae when used in
	·Western	combination with corn hybrids
	Southern	containing in-plant protection
		against corn rootworm larvae
<u>'</u>	Corn Rootworm Larvae	9 to 10 ounces per 1,000 feet of
	Northern	row
	Western	
	Southern	3
		·
	Cutworms	
	Wireworms	·
	White Grubs	
	Seedcorn Maggots	•
	Grape Colaspis	
	Symphylans	

#### Application

SMARTCHOICE 2.5G should be applied with a graular pesticide applicator properly calibrated to assure accurate placement and proper application rate. SMARTCHOICE 2.5G 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**

SMARTCHOICE 2.5G can be applied 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 that the granules drop into the open seed furrow and are completely covered with soil. In-furrow application provides optimal control of corn rootworms, wireworms, white grubs, seedcorn maggots, and grape colaspis.

#### Further Application Information

- Granules exposed on the soil surface in the turn areas at the row ends and in loading areas must be incorporated into the top one-inch of soil immediately after treating fields by discing, harrowing or other suitable means.
- Granular application equipment must be properly calibrated to accurately apply SMARTCHOICE 2.5G.
- Do not make more than one application per year.
- Under windy conditions the use of wind shields is recommended to ensure proper placement of granules.
- SMARTCHOICE 2.5G is non-corrosive to equipment and is nonflammable.

#### **Crop Rotational Intervals**

- Corn ......Anytime
- Other crops......30 days

### Determining the Amount of SMARTCHOICE 2.5G per acre

To determine the approximate amount of SMARTCHOICE 2.5G needed per acre, select the use rate per 1,000 row feet and the row spacing.

	Amount of	Poun	ds of SMART	CHOICE 2.50	Required pe	r Acre at Var	ious Row Spa	ncings
	SMARTCHOICE per 1,000 feet of	15 '' or	20 in	22 in	30 in	34 in	36 in	40 in
	row	twin row	•					
	6.0 oz.	13.0	-9.811.4	9.0	6.6	5.8	5.6	5.2
	7.0 oz.	15.2		10.4	7.6	6.8	6.4	6.0
,	9.0 oz.	19.621.8	14.616.4	13.414.8	9.810.8	8.69.6	8.29.0	7.88.6
	10.0 oz.							

#### CALIBRATION INSTRUCTIONS & GAUGE SETTINGS

#### **Equipment Calibration**

The following **equipment calibration procedures** should be performed to ensure that the proper amount of SMARTCHOICE 2.5 G will be applied:

- 1. Fill insecticide hoppers with SMARTCHOICE 2.5G.
- 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 (at the 7.5 oz recommended rate) is 1.88 oz of granules. 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.

	Approximate Equipment Gauge Settings SMARTCHOICE 2.5G at 7.0 oz per 1,000 ft of row					
Speed in mph						
Equipment	4	5 .	6	7	8	
Case International Harvester (Gate/Dial)	1 .	2	<u>2</u>	2	2	
-Old	8	0	1	3 ·	5	
Case International Harvester (Gate/Dial)	1	2	2	2	2	
-New	9	0	2	4	6	
Gandy	18	20	22	24	25	
John Deere MaxEmerge 2 (Models 7200-7300)	22	26	28	35	39.	
John Deere 7000 MaxEmerge (Even) (0-10-20-30-40)	13	15	17	19	22	
John Deere 7000 MaxEmerge (Odd) (5-15-25-35-45)	12	14	16	17	18	
John Deere MaxEmerge Plus	22	26	30	35	39	
Kinze (Old)	13	. 14	16	18	20	
Kinze (New)	20	24	28	32	36	
White Series 5100	9	13	15	17	20	
White Series 6100	15	. 17	18	19	21	

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 instructions 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.

#### STORAGE AND DISPOSAL

**PESTICIDE STORAGE:** Store in a secure, locked, dry and temperate area where children, unauthorized persons or animals cannot enter. Store in original container. Keep the container closed 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.

**PESTICIDE 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 your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### 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.

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.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE FULLEST EXTENT PERMITTED BY LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

AMVAC offers this product, and Buyer accepts it, subject to the foregoing Limited Warranty which may be varied only by agreement in writing signed by an authorized representative of AMVAC.

SMARTCHOICE is a trademark of AMVAC Chemical Corporation.

AMVAC Chemical Corporation 4100 E. Washington Boulevard Los Angeles, CA 90023 U.S.A. 1-323-264-3910 www.amvac-chemical.com