

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

February 2, 2010

Julie T. Tran Amvac Chemical Corporation 4695 McArthur Court, Suite 1250 Newport Beach, CA 92660

Subject:

Amendment - Revised packaging language

SMARTCHOICE 5G EPA Reg. No. 5481-561

Your submission dated July 31, 2009

Dear Ms. Tran:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable subject to the comments listed below. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records.

- 1. Move "Organophosphate and Pyrethroid" to the NOTE TO PHYSICIAN section at the end of the First Aid statement.
- 2. Replace "Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco" with "Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco or using the toilet" in the *Precautionary Statement* section.
- 3. Under the *Environmental Hazards section* delete "Apply this product only as specified on this label" this statement is duplicated in the *Directions for Use* section.
- 4. On page 5 replace, "The following equipment calibration procedures should be performed ... etc." with "The following equipment calibration procedures must be performed ... etc." under Smartchoice 5G Calibration Guidelines section.
- 5. Under Application, Further Application Information, bullet 2, replace "LOCK 'N LOAD system should be properly calibrated ... etc." with "LOCK 'N LOAD system must be properly calibrated ... etc."

If you have any questions regarding this action, please contact BeWanda Alexander at <u>Alexander.bewanda@epa.gov</u> or (703) 305-7460.

Sincerely, Betthanda Alexander For

Richard Gebken

Interim Product Manager 13

Insecticide Branch

Registration Division (7505P)

Enclosure

RESTRICTED USE PESTICIDE

DUE TO ACUTE HUMAN, AVIAN, AND AOUATIC 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

SMARTCHOICETM 5G

granular insecticide

For Use On Corn Only

Alternate Wording when packaged in SMARTBOX: Available in the SMARTBOX®, a Closed Handling and Application System. Alternate Wording when packaged in LOCK 'N LOAD: Available in LOCK 'N LOAD®, a Closed Loading System. TO CONTROL CORN ROOTWORM LARVAE, WIREWORMS, CUTWORMS, SEEDCORN MAGGOTS, WHITE GRUBS, GRAPE COLASPIS AND SYMPHYLANS ON FIELD CORN, SEED CORN, SWEET CORN, AND POPCORN.

ACTIVE INGREDIENT: (% by weight)

Chlorethoxyfos:

Bifenthrin: (2-methyl [1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-INERT INGREDIENTS: 95.0%

with COMMENTS In EPA Letter Dated

STOP! READ LABEL BEFORE USE KEEP OUT OF REACH OF CHILDREN

DANGER RPELIGRO **POISON**

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

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.)

	FIRST AID Organophosphate and Pyrethroid
If swallowed:	 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 do so 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 an 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
	container or label with you when calling a poison control center or doctor, or going for treatment. FOR THE ÆRGENCIES, PHONE 24 HOURS A DAY:

SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE.

EPA Reg. No. 5481-561 EPA Est. No.

N▼AMVAC

4100 E. Washington Blvd. Los Angeles, CA 90023 U.S.A 1-323-264-3910 • www.amvac-chemical.com

NOTE TO PHYSICIAN

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.

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

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, or using tobacco. 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 trubber ≥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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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 SMARTBOX (Alternate Wording when packaged in LOCK 'N LOAD: LOCK 'N LOAD) system when used correctly qualifies as a closed loading system under the WPS. Loaders using the SMARTBOX (Alternate Wording when packaged in LOCK 'N LOAD: 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. Apply this product only as specified on this label.

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 interver. 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-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.

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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.

GENERAL INFORMATION

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	Cutworms	3.0 to 3.5 ounces per 1,000 feet of
Seed Corn	Wireworms	row
Sweet Corn	White Grubs	
Popcorn	Seedcorn Maggots	
	Grape Colaspis	
	Symphylans	
	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
	Corn Rootworm Larvae	4.5 to 5.0 ounces per 1,000 feet of
	Northern	row
	Western	
	Southern	
	Cutworms	
	Wireworms	
	White Grubs	
	Seedcorn Maggots	
	Grape Colaspis	
	Symphylans	oe e
Restrictions:		
Do not make more than one app		
		دوددور رزر د ر
Crop Rotational Intervals		
Corn	د در د در	
Other crops	30 days	ر دّ ر



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 SMARTBOX <u>Alternate Wording when packaged in LOCK 'N LOAD</u>: LOCK 'N LOAD system should 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	Pounds of SMARTCHOICE 5G Required per Acre at Various Row Spacings								
SMARTCHOICE per 1,000 feet of row	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		

Alternate Wording when packaged in LOCK 'N LOAD:

SMARTCHOICE 5G CALIBRATION GUIDELINES

The following equipment calibration procedures should 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.

Planting Speed MPH		4		5		6	7	,8,2°	
Application Rate (oz per 1000 row ft)	3.5	5.0	3.5	5.0	3.5	5.0	3.5 5.0	3.5 ° 5.	.0
Planter / Metering System							((((((((((((((((((((٠ د <u>د</u> د <u>د</u>	
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

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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.

Alternate Wording when packaged in SMARTBOX: SMARTBOX INFORMATION

SMARTCHOICE 5G must be applied with the SMARTBOX system. Please refer to the SMARTBOX operator's manual for detailed information on system operation and calibration procedures.

Alternate Wording when packaged in SMARTBOX: DO NOT ATTEMPT TO OPEN OR TAMPER WITH THE CONTAINER. DO NOT ATTEMPT TO REPAIR THE SMARTBOX APPLICATION SYSTEM. IF REPAIRS ARE NECESSARY, CONTACT YOUR AMVAC SALES REPRESENTATIVE OR THE MANUFACTURER OF THE APPLICATION SYSTEM.

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 fuman 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.

<u>Alternate Wording when packaged in SMARTBOX</u>: **CONTAINER RETURN:** DO NOT DISCARD THE CONTAINER. All SMARTBOX containers must be returned per instructions provided. Do not attempt to open or tamper with the container. Once empty, containers are not intended for reuse.

<u>Alternate Wording when packaged in LOCK 'N LOAD</u>: **CONTAINER DISPOSAL**: Return empty container to point of purchase. Consult Federal, State or local disposal authorities for approved alternative procedures such as limited open burning.

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 EXTENT CONSISTENT WITH APPLICABLE 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 and SMARTBOX and LOCK 'N LOAD are registered trademarks of Amvac Chemical Corporation. MaxEmerge is a registered trademark of Deere and Company.

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