



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

5481-587

Date of Issuance:

7/28/16

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

SMARTCHOICE LIQUID
INSECTICIDE

Name and Address of Registrant (include ZIP Code):

Chris Davis
Regulatory Product Manager
AMVAC Chemical Corporation
4695 MacArthur Court, Suite 1200
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 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 section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Meridith M. Fry, Ph.D., Product Manager 4
Invertebrate & Vertebrate Branch 1 (IVB1)
Registration Division (7505P), Office of Pesticide Programs

Date:

7/28/16

2. You are required to comply with the data requirements described in the DCI Orders identified below:
 - a. Bifenthrin GDCI-128825-902
 - b. Bifenthrin GDCI -128825-1114
 - c. Bifenthrin GDCI -128825-1158
 - d. Bifenthrin GDCI -128825-1159
 - e. Chlorethoxyfos GDCI-129006-938

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI Orders listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division:

<http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.
4. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 5481-587.”
5. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 02/03/2015

If you have any questions, you may contact Elizabeth Fertich at 703-347-8560 or via email at fertich.elizabeth@epa.gov.

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	INSECTICIDE
-------	----	-------------

SMARTCHOICE® LIQUID 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)ester25.8%
 Bifenthrin: (2-methyl [1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-
 2,2-dimethylcyclo-propanecarboxylate4.2%

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-xxx**

EPA Est. No.

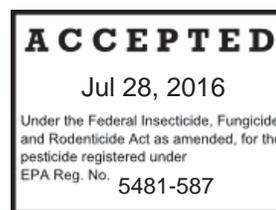
Made in U.S.A.

Net Weight:

As Marked on Container



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



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

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

Contains an Organophosphate which inhibits cholinesterase and a Pyrethroid

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

Warning Symptoms

SMARTCHOICE LIQUID 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 pinpoint 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 (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 (such as barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, or Viton \geq 14 mils). Remove and wash contaminated clothing before reuse. Wear a pesticide respirator jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health. For handling activities, use a non-powered, air purifying canister-type respirator equipped with an organic vapor canister that uses P- or R-series air purifying filter. When mixing or loading wear a chemical resistant apron.

Keep Out of Reach of Domestic Animals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

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 such as barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \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
 - Chemical-resistant apron
 - Chemical-resistant footwear plus socks
 - A NIOSH-approved particulate respirator with any N, R, or P filter, NIOSH approval number prefix TC-84A, or a NIOSH-approved powered air-purifying respirator with an HE filter with NIOSH-approval number prefix TC-21C.

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):
 - A particulate filtering respirator, which includes a NIOSH approved respirator with any R, P, or HE filter or NIOSH approved number prefix TC-84A.
 - 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 such as or made out of any waterproof material,
- 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

SMARTCHOICE LIQUID 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 SMARTCHOICE LIQUID. SMARTCHOICE LIQUID 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

SMARTCHOICE LIQUID 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 SMARTCHOICE LIQUID 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 SMARTCHOICE LIQUID in a volume of water which will ensure uniform placement in the furrow for best control of soil pests.

Determining the Amount of SMARTCHOICE LIQUID per Acre

To determine the approximate amount of SMARTCHOICE LIQUID 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 SMARTCHOICE LIQUID 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 SMARTCHOICE Liquid							
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.

Dealers Should Sell in Original Packages Only.

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. 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, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, 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.

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.

© 2016 AMVAC Chemical Corporation. All Rights Reserved. AMVAC, SMARTCHOICE and the AMVAC logo are U.S. registered trademarks owned by AMVAC Chemical Corporation. Chemtrec is a trademark of the American Chemistry Council, Inc.

AMVAC Chemical Corporation

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