

JUL 19 1994

John S. Thornton  
Miles Inc.  
P.O. Box 4913  
8400 Hawthorn Road  
Kansas City, MO 64120-0013

Dear Mr. Thornton

Subject: Revised PPE labeling  
Bolstar 6 Emulsifiable Insecticide  
EPA Registration No. 3125-321  
Amendment application of May 12, 1994

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), sec. 3(c)(7)(A), is acceptable provided that you:

1. Submitted 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.

2. Submit five (5) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

DHE

Dennis H. Edwards, Jr.  
Product Manager (19)  
Insecticide Rodenticide Branch  
Registration Division (H-7505C)

Enclosure

Reason to Issue: To remove requirement for respirator under PPE for Applicators; to change REI to 24 hours.

Date of Draft: 04/20/94(Pre-Reg)(S)

**RESTRICTED USE PESTICIDE**  
 Due to acute and avian 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.

# BOLSTAR 6

## Emulsifiable Insecticide

---

**FOR THE CONTROL OF CERTAIN INSECTS ON COTTON**

**ACTIVE INGREDIENT:**

O-Ethyl O-[4-(methylthio)phenyl] S-propyl phosphorodithioate ..... 64%

**INERT INGREDIENTS:** ..... 36%

100%

Contains 6 lb O-EthylO-[4-(methylthio)phenyl]S-propyl phosphorodithioate per gallon.  
(This product contains aromatic petroleum distillates.)

U. S. Patent No. 3,947,529

EPA Reg. No. 3125-321

EPA Est. 3125-MO-1

Net \_\_\_\_ Gallons

**STOP - READ THE LABEL BEFORE USE**

**KEEP OUT OF THE REACH OF CHILDREN**

**WARNING**

**AVISO**

(See Statements of Practical Treatment and Other Precautions on Side Panel)

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

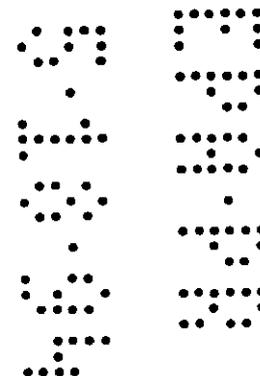
(If you do not understand the label, find someone to explain it to you in detail.)

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

JUL 19 1994

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

325-321



**BEST AVAILABLE COPY**

BOLSTAR 6

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### WARNING

**CAUSES EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH THE SKIN.**

Do not get in eyes. Do not get on skin. Do not breathe spray mist. Do not contaminate feed or food. Keep out of reach of children. Should poisoning occur, obtain prompt medical aid. Prolonged exposure will result in cholinesterase depression.

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

**Applicators and other handlers must wear:**

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or viton
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing or loading
- ~~Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC 21G)~~

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning / maintaining PPE. If no such

instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**User Safety Recommendations:**

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash 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.

**To Physician:** The toxic mode of action is to depress cholinesterase. The victim should be treated symptomatically. Atropine sulfate when administered in conjunction with 2-PAM is antidotal. Stomach contents should be removed by gastric lavage only.

## STATEMENTS OF PRACTICAL TREATMENT

### Organophosphate

If in eyes, immediately flush eyes with plenty of water for at least 15 minutes. For further treatment, get medical attention.

If swallowed, drink promptly a large quantity of egg white or gelatin solution, or if these are not available, large quantities of water. Avoid alcohol.

If on skin, wash thoroughly with soap and warm water.

## ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Use with care when applying in areas frequented by wildlife or adjacent to any body of water. When BOLSTAR 6 is applied by air at rates of 1-1/2 pints or greater per acre, applications should be made no closer than 100 feet of shorelines of fish bearing waters. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor run-off or drift from target areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

or residues on crops or weeds. Do not apply this product or allow it to drift to crops or weeds on which bees are foraging. Additional information may be obtained from your Cooperative Extension Services.

Do not use on other crops used for food or forage. Use only according to label directions. Application at rates above those shown may result in illegal crop residues. Do not treat food crops grown in the greenhouse.

Crops to be grown in rotation with cotton should not be planted within 60 days after last application of BOLSTAR 6.

This product is toxic to bees exposed to direct treatment

## 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), notification to workers, 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 ~~24~~ hours.

~~The REI is 72 hours in outdoor areas where average rainfall is less than 25 inches a year.~~

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 short-sleeved shirt and short pants
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or viton
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure

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

**IMPORTANT:** Read these entire Directions and Conditions of Sale before using BOLSTAR 6 emulsifiable insecticide.

**CONDITIONS OF SALE:** THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE THE DIRECTIONS FOR CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED FOR A RANGE OF WEATHER CONDITIONS SIMILAR TO THOSE WEATHER CONDITIONS THAT ARE ORDINARY AND CUSTOMARY IN THE GEOGRAPHIC AREA WHERE THE PRODUCT IS USED. INSUFFICIENT CONTROL OF PESTS AND/OR INJURY TO THE CROP TO WHICH THE PRODUCT IS APPLIED MAY RESULT FROM THE OCCURRENCE OF EXTRAORDINARY OR UNUSUAL WEATHER, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO OTHER CROPS, ANIMALS, MAN, OR THE ENVIRONMENT. MILES OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL WEATHER, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF MILES AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

**RESISTANCE:** Some insects are known to develop resistance to insecticide used repeatedly. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. If resistance to this product develops in your area, this product alone will not continue to provide adequate control. Consult your state extension agent/agricultural advisor for insect resistance management strategies and recommended insect control methods for your area.

### USE IN CHEMIGATION SYSTEMS

**Types of Irrigation Systems:** Apply BOLSTAR 6 only through sprinkler, including center pivot, lateral move, side roll, or overhead solid set irrigation systems. Do not apply BOLSTAR 6 through any other type of irrigation system.

### GENERAL DIRECTIONS FOR ALL RECOMMENDED TYPES OF IRRIGATION SYSTEMS

**Uniform Water Distribution and System Calibration:** The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

The system must be calibrated to uniformly apply the rates specified for chemigation application of specific crops. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

**BEST AVAILABLE COPY**

**Chemigation Monitoring:** A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

**Drift:** Do not apply when wind speed favors drift beyond the area intended for treatment.

**Required System Safety Devices:** The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

**Using Water from Public Water Systems: DO NOT APPLY BOLSTAR 6 THROUGH ANY IRRIGATION SYSTEM PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM.** Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

.....  
: BOLSTAR 6 may be applied through any of the  
: recommended types of irrigation systems which may be  
: supplied by a public water system only if the water from  
: the public water system is discharged into a reservoir tank  
: prior to pesticide introduction. There shall be a complete  
: physical break (air gap) between the outlet end of the fill  
: pipe and the top or overflow rim of the reservoir tank of  
: at least twice the inside diameter of the fill pipe. Before  
: beginning chemigation, always make sure that the air gap  
: exists and that there is no blockage of the overflow of the  
: reservoir tank.  
: .....

Any irrigation system using water supplied from a public water system must also meet the following requirements.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

**Agitation:** For application of BOLSTAR 6 alone, a chemical supply tank is not necessary for premixing since BOLSTAR 6 mixes well with water in the irrigation line. If a chemical supply tank is used, for application of BOLSTAR 6 alone or in combination with other chemicals, constant strong mechanical or hydraulic agitation must be maintained in the chemical supply tank during the entire period of application.

**Chemical Supply Tank Dilution:** If a chemical supply tank is used, you must determine the required amounts of BOLSTAR 6 and water to mix in the tank.

The amount of BOLSTAR 6 needed equals the number of pints of BOLSTAR 6 to be applied per acre multiplied by the number of acres to be chemigated.

The amount of emulsion needed equals the gallons of emulsion delivered per hour by the injection pump multiplied by the number of hours chemigation will take place.

The amount of water needed equals the amount of emulsion needed minus the amount of BOLSTAR 6 needed.

For example, if you want to apply 1 pint of BOLSTAR 6 per acre to 130 acres in 20 hours and your injection pump delivers 15 gallons per hour, you need: 1 pint BOLSTAR 6 per acre X 130 acres = 130 pints or 16.25 gallons of BOLSTAR 6. And, you need: 15 gallons per hour X 20 hours = 300 gallons of emulsion, minus 16.25 gallons of BOLSTAR 6 = 283.75 gallons of water.

**BEST AVAILABLE COPY**

RECOMMENDED APPLICATIONS			
CROP	INSECT	PINTS	REMARKS
Cotton	Tobacco budworm Cotton bollworm Lygus (Nymphs)	1 to 2	Apply specified dosage per acre by air or ground equipment alone or in sufficient water or refined vegetable oil for complete coverage. For best results during mid-to-late season or under hot dry conditions use 3 to 5 gallons of water per acre by air. When using oil, use at least one (1) quart total volume per acre. Pre-mix material. Oil mixture should be sprayed within 12 hours to avoid compatibility problems. Always run a small jar compatibility test before large scale mixing, as batches of vegetable oil tend to vary in composition.
	Fall armyworm Beet armyworm Pink bollworm	1-1/3 to 2	For application by sprinkler irrigation systems: Apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.  For best control of bollworms, budworms and armyworms, make applications within 3 days of egg hatch and before young larvae migrate to squares, blooms, or bolls.
	Fleahoppers	2/3	Cotton bollworm and tobacco budworm: apply on a 5 to 7 day interval as needed, beginning when scouting indicates local egg or larval treatment thresholds have been reached. For light infestations of larvae (1st and 2nd instar) apply 1 pint (3/4 lb active) per acre. For moderate infestations of larvae (1st and 2nd instar) apply 1-1/3 pt (1 lb active) per acre. For heavy infestations of larvae (1st and 2nd instar), make 2 applications of the 2 pt (1-1/2 lb active) rate per acre to bring infestations under control. Then reduce rate to 1-1/3 pt (1 lb active) per acre.
	Suppression of: Lygus (adults) Whiteflies (except sweet potato whitefly) Spider mites (Carmine and two-spotted)	2/3 to 2	In California and Arizona the minimum use rate for control of larvae is 1-1/3 pt (1 lb. active) per acre, regardless of degree of infestation of tobacco budworm or cotton bollworm.  <b>NOTE:</b> In areas of frequent rainfall the higher rates and closer spray intervals (5-day minimum interval required) may be needed for adequate control.
	For early to mid-season use in Southern cotton growing areas  Thrips (Except western flower thrips) Fleahoppers Plant bugs	1/3	For ovicidal effect: apply 1/3 pt (1/4 lb active) per acre. Time applications for the "brown egg" stage just prior to egg hatch. Higher rates of BOLSTAR 6 or a tank mix with another larvicide will be required for control of larvae.  Armyworms: make 2 applications 5 days apart when larvae first appear. For light infestations of 1st and 2nd instar larvae apply 1-1/3 pt (1 lb active) per acre. For moderate infestations of 1st and 2nd instar larvae apply 1-2/3 pt (1-1/4 lb active) per acre. For heavy infestations of 1st and 2nd instar larvae apply 2 pt (1-1/2 lb active) per acre.
Ovicidal Effect Cotton bollworm Tobacco budworm	1/3	Early to mid-season thrips, fleahoppers, and plant bugs: apply 1/3 pt (1/4 lb active) per acre during early to mid-season when thrips, fleahoppers, or plant bugs reach economic threshold.  In any case do not apply more than a total of 8 pt per acre with the last application no closer to harvest than 21 days in California and Arizona, or 14 days in all other states. Allow at least 5 days between applications. Do not graze treated fields.	

NOTE: BOLSTAR 6 when used on cotton may be tank-mixed with GUTHION 2L or GUTHION 2S when GUTHION is used for control of cotton insects at the recommended rates of GUTHION.

Do not apply GUTHION alone within 14 days of harvest of cotton after applying tank mixes of BOLSTAR plus GUTHION. In California and Arizona, GUTHION alone should not be applied within 21 days of harvest of cotton after applying this tank mix.

**Cleaning the Chemical Injection System:** In order to accurately apply pesticides, the chemical injection system must be kept clean; free from chemical or fertilizer residues and sediments. Refer to your owners manual or ask your equipment supplier for the cleaning procedure for your injection system.

**Flushing the Irrigation System:** At the end of the application period, allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

**SPRINKLER IRRIGATION SYSTEMS**

All directions and requirements listed under the GENERAL DIRECTIONS AND REQUIREMENTS FOR ALL RECOMMENDED TYPES OF IRRIGATIONS SYSTEMS section of this label must be followed for sprinkler irrigation systems.

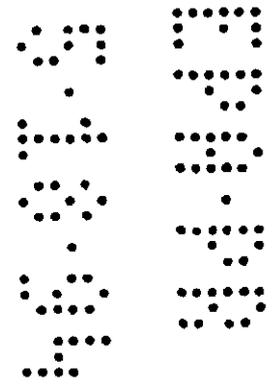
In addition, the following directions apply to sprinkler irrigation systems.

Do not apply when wind speed favors drift beyond the area intended for treatment.

It is recommended that nozzles in the immediate area of control panels, chemical supply tanks, pumps and system safety devices be plugged to prevent chemical contamination of these areas.

**Center-Pivot and Automatic-Move Linear Systems:** Inject the specified dosage per acre continuously for one complete revolution or move of the system. **DO NOT USE END GUNS.** The system should be run at maximum speed.

**Solid Set and Manually Controlled Linear Systems:** Injection should be during the last 30 to 60 minutes of a regular irrigation period or as a separate 30 to 60 minute application not associated with a regular irrigation. **DO NOT USE END GUNS.**



## STORAGE AND DISPOSAL

**Pesticide Disposal:** Do not contaminate water, food or feed by storage or 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 at the nearest EPA Regional Office for guidance.

**Container Disposal:**

**Metal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by an procedures approved by state and local authorities.

**Plastic:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by an procedures approved by state and local authorities, by burning. If burned, stay out of smoke.

Store in a cool, dry place, away from open flame and extreme heat, and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking invert to prevent leakage. If the container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides above. In spill or leak incidents, keep unauthorized people away. You may contact the Miles Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Miles Kansas City Emergency Response Telephone No. is 816-242-2582, or contact Chemtrec at 800-424-9300.

**BEST AVAILABLE COPY**

Miles Inc.  
Crop Protection Products  
Box 4913, Kansas City, MO 64120-0013

