

pm 23

59639-79

page 1 of 6

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

APR 20 1994

Kevin Williams
Valent U.S.A. Corporation
1333 N. California Blvd., Suite 600
Walnut Creek, CA 94596-8025

Dear Mr. Williams:

Subject: Revised Label - Add Use on Celery, Lettuce, and Endive
Bolero 8 EC
EPA Registration No. 59639-79
Your Submission Dated November 16, 1993

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records. Please submit three (3) final printed copies for the above mentioned label before releasing the product for shipment.

Sincerely yours,

Joanne I. Miller
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (7505C)

Enclosure

CONCURRENCES

SYMBOL	7505C							
SURNAME	D. KENNY							
DATE	4/20/94							

2 4 6

October 28, 1993

**BOLERO ® 8 EC
(HERBICIDE)**

Active Ingredient	By Wt.
Thiobencarb	84%
Inert Ingredients	16%
S-[4-(chlorophenyl)methyl] diethylcarbamothioate	

Contains 8 pounds S-[4-(chlorophenyl)methyl] diethylcarbamothioate per gallon.

ACCEPTED
with COMMENTS
In EPA Letter Dated

APR 20 1994

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
59639-79

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE SIDE PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS.

NET CONTENTS 30 GALLONS

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION

Causes eye irritation. Harmful if swallowed. Avoid contact with eyes, skin and clothing. Avoid breathing spray mist.

STATEMENT OF PRACTICAL TREATMENT

In case of eye contact, wash eyes immediately with plenty of water. See a doctor if irritation persists. If swallowed, give a large amount of water to drink, make person vomit, and call a doctor. ~~Note to Physicians:~~ Emergency Information call 1-800-892-0099.

Personal Protective Equipment (PPE):

Applicators and other handlers must wear: long-sleeved shirt and long pants, shoes plus socks.

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
Users should:
<ul style="list-style-type: none"> ● 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.

ENVIRONMENTAL HAZARDS

This product is toxic to shrimp. ~~For terrestrial uses~~, 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 contaminate water when disposing of equipment washwaters.

The use of BOLERO 8 EC on rice is restricted to protect the endangered fat pocketbook pearly mussel (*Potamilus capax*) and its habitat. In Arkansas, the following use prohibitions apply in Cross, Lee, Mississippi, Poinsett and St. Francis Counties:

1. BOLERO 8 EC will not be applied aerially within one mile of the St. Francis Floodway (west branch of the St. Francis River) where the fat pocketbook pearly mussel is known to occur;
2. BOLERO 8 EC will not be ground applied within 1,000 feet of the St. Francis Floodway where the fat pocketbook pearly mussel is known to occur;
3. Rice fields will not be flooded for at least 3 days after application, and water application on the fields is not to be drained for at least 7 days after flooding a treated field in areas where waters drain into the St. Francis Floodway where the fat pocketbook pearly mussel is known to occur; and
4. Should on-going distributional surveys of the fat pocketbook pearly mussel find additional populations in the St. Francis Floodway, or other waters, the same restrictions would apply to these waters.

PHYSICAL OR CHEMICAL HAZARDS

Do not store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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 12 hours.

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, waterproof gloves and shoes plus socks.

STORAGE AND DISPOSAL

PROHIBITIONS

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited.

STORAGE

- Keep pesticide in original container.
- Do not put concentrate or dilute into food or drink containers.
- Store in cool, dry place.
- Protect from excessive heat.
- For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-892-0099 or Chemtrec 1-800-421-2000.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Triple rinse (or equivalent). Do not reuse container. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or dispose of by other procedures allowed by State and local authorities.

11 17 6

DIRECTIONS

Do not apply this product through any type of irrigation system.

GENERAL INFORMATION

BOLERO 8 EC applied late preemergence will control many weeds in rice. The Propanil component of BOLERO 8 EC plus Propanil tank mixture increases postemergence activity for control of weeds listed. BOLERO 8 EC will provide residual control of some weeds up to 5 weeks following application. The BOLERO 8 EC plus Propanil tank mixture will not prevent reinfestation of Hemp Sesbania Northern or Indian Jointvetch, Broadleaf Signalgrass or Pitted Morningglory. For water-seeded rice, apply to non-flooded fields only, application should not be made before rice is in the 2 leaf stage of development and soils should be sealed and wet at the time of application. Do not apply to stressed rice. Temporary injury to seedling rice may occur under certain conditions.

DRY-SEEDED RICE

Late Preemergence Application (Prior to rice and weed emergence) - For control of Barnyardgrass, Junglerice (*Echinochloa* spp.), Sprangletop (*Leptochloa* spp.), Crabgrass (*Digitaria* spp.) Fall Panicum (*Panicum dichotomiflorum*), Dayflower (*Cosmosolina communis*), Eclipta (*Eclipta alba*) and False Pimpernel (*Lindernia* spp.): Apply BOLERO 8 EC 1 to 5 days prior to rice emergence; generally this would be 5 to 9 days after planting of the rice. Apply 4 pts. of BOLERO 8 EC per acre after soils have been sealed by rainfall or by flushing. Apply to well prepared seedbeds free of large clods. Soils should be wet at time of application. Do not apply BOLERO 8 EC as a preemergence treatment to cracked soil.

Early Postemergence Application - For control of emerged Watergrass: Apply 4 pts. of BOLERO 8 EC per acre when Watergrass has developed no further than the 2 leaf stage. Rice may be fully emerged at time of application. Soil should be wet at time of application.

Early Postemergence Application in Combination with Propanil - For control of Barnyardgrass, Junglerice, Sprangletop, Broadleaf Signalgrass (*Bracharia platyphylla*), Crabgrass, Fall Panicum, Duckweed (*Heteranthera* spp.), Redstem (*Ammannia* spp.), Waterhyssop (*Bacopa rotundifolia*), False Pimpernel, Flaisedge (*Cyperus erythrorhizos*, *C. iria*), Spikerush (*Eleocharis obtusa*, *E. parvula*), Hornabgrass (*Fimbristylis* spp.), Hemp Sesbania (*Sesbania exaltata*), Northern and Indian Jointvetch (*Aeschynomene* spp.), Dayflower, Eclipta and Pitted Morningglory (*Ipomoea lacunosa*):

1. **Application to Wet Soil -** Apply 3 pts. per acre of BOLERO 8 EC plus 2 to 3 qts. of Propanil 4 E per acre for emerged grasses at the 2 leaf stage of development or less (Sprangletop less than 1/2"), aquatics less than 1/2" tall and broadleaf weeds less than 2" tall. Rice may be emerged at the time of application. Soil should be wet at the time of application.

or

2. **Application to Dry Clay or Silt Loam Soils and Rice in the 2 to 3 Leaf Stage -** Apply 3 pts. per acre of BOLERO 8 EC plus 2 to 3 qts. of Propanil 4 E per acre for emerged grasses at the 2 leaf stage of development or less (Sprangletop less than 1/2"), aquatic less than 1/2" tall and broadleaf weeds less than 2" tall. At the time of application, the soil must have previously been sealed by rain or flushing and should not be cracked. Rice should be in the 2 to 3 leaf stage of development. The soil must be wet by rain or flushing within 3 days after application or a reduction in initial control and residual activity can be expected. Do not apply to stressed rice as it may be seriously injured or killed. If a flush is used to wet the soil or heavy rains move quickly through the flood gates, lack of weed control around the gates may be evident.

or

3. **Split Application -** Apply BOLERO 8 EC alone as a Late Preemergence Application followed by a tank mixture with Propanil as an early postemergence application to dry seeded rice on a smooth, wet soil surface in a split application schedule as:

Split Application Technique - Apply 2 pts. per acre of BOLERO 8 EC as a late pre-emergence application 1 to 5 days before rice emerges (usually 5 to 9 days after seeding) and prior to weed emergence. Soil surfaces should be well prepared and free of large clods. This application should be followed in 10 to 14 days by an early postemergence application of 2 pts. per acre of BOLERO 8 EC plus 2 to 3 qts. per acre of Propanil 4 E. Emerged grasses should be in the 1 to 2 leaf stage or less (Sprangletop less than 1/2"), aquatics less than 1/2" tall and broadleaf weeds less than 2" tall. Rice may be emerged at the time of the early postemergence application. Soil should be wet at the time of application.

WATER-SEEDED RICE

Early Postemergence - For control of Barnyardgrass, Junglerice, Sprangletop, Broadleaf Signalgrass, Crabgrass, Fall Panicum, Duckweed, Redstem, Waterhyacinth, False Pimpernel, Flatsedge, Spikerush, Horrahgrass, Heap Sesbania, Northern and Indian Jointgrass, Dayflower, Eclipta and Pitted Morningglory. Apply to non-flooded fields only. Apply 3 pts. of BOLERO 8 EC per acre plus 2 to 3 qts. of Propanil + E for emerged grasses at the 2 leaf stage of development or less (Sprangletop less than 1/2") broadleaf weeds less than 2" tall and aquatics less than 1/2" tall. Application should not be made before rice is in the 2 leaf stage of development and soil should be sealed and wet at the time of application.

Do not apply BOLERO 8 EC to stressed rice. Do not apply BOLERO 8 EC to fields with exposed seed as exposed seed will be killed. Do not apply BOLERO 8 EC to second crop (stubble crop) rice.

Water Management - After application, flush the fields as often as necessary to prevent crusting and drying of the soil. Fields should be flooded as soon as the rice plants will tolerate permanent flooding.

Application Equipment

Aircraft: Apply BOLERO 8 EC in no less than 10 gals. spray mix per acre.

Ground Sprayers: Apply in 10 to 20 gals. of total spray mix per acre.

Precautions: Do not apply more than 4 lbs. active ingredient per acre per year. Do not plant subsequent crops in treated fields within 6 months of last application. Do not overlap or double spray ends of field. Avoid drift to non-target areas. Do not apply to rice paddies where commercial catfish or crayfish farming is practiced. Do not use adjacent to catfish ponds. In Texas and other areas where double cropping is the agricultural practice, do not apply to a second stubble rice crop. Water drained directly from treated fields must not be used to irrigate other crops.

Do not apply BOLERO 8 EC plus Propanil mixture within 14 days before or after organophosphate or carbamate insecticide application. Do not apply tank mix with Propanil when rain is expected within 6 hours. Rice seedlings with succulent growth may exhibit temporary foliar burn which may be greater than conventional Propanil application but usually recover after 10 to 14 days. Do not mix liquid nitrogen, zinc or surfactants with BOLERO 8 EC alone or when mixed with Propanil.

This product can be mixed with Propanil for use on rice in accordance with the more restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

Application to stressed rice can result in stand reduction, chlorosis, growth inhibition, delayed maturity and/or leaf desiccation. Stress factors include but are not limited to the following Daily temperatures below 65° F. or above 95° F., problem soils, (i.e., Zn deficiency, high salt content, high pH.), excessive moisture, (i.e., above field capacity while rice seed is germinating), drought conditions, poor field drainage or deep water after application.

VEGETABLES

CELERY - Grows on muck soil (Florida only): For control of Common Purslane, Barnyardgrass and Goosegrass and suppression of Common Lambquarters and Pigweed. Make application of 4 qts. BOLERO 8 EC per acre after transplanting and prior to weed germination/emergence. Apply with ground equipment in 30 to 40 gals. of water per acre no later than 10 days after transplanting. For best performance, soil must be wet at the time of application. Additional moisture (overhead irrigation) after application may improve performance. Celery must be trimmed (tops removed) at harvest. Do not use tips for celery flakes. Do not apply BOLERO 8 EC within 70 days of harvest.

ENDIVE (ESCAROLE), LETTUCE - Grows on muck soil (Florida only): For control of Common Purslane and Barnyardgrass and suppression of Pigweed. Make application of 3 qts. BOLERO 8 EC per acre after planting and prior to weed germination/emergence (no later than 10 days after planting). Apply by either broadcast or a directed, shielded sprays (to row middles) with ground equipment in 30 to 50 gals. of water per acre. For best performance soil must be wet at the time of application. Additional moisture (overhead irrigation) soon after application may improve performance. BOLERO 8 EC can cause crop stunting if the crop seed zone is treated (particularly under high temperature and moisture conditions). Do not apply BOLERO 8 EC within 60 days of harvest.

PRECAUTIONS: Do not rotate crops other than celery, endive (escarole) and lettuce into BOLERO treated fields within 4 months of BOLERO application. Do not feed crop or crop remains to livestock or allow grazing in treated areas.

Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.

IMPORTANT INFORMATION. READ BEFORE USING PRODUCT. LIMITED WARRANTY: 1. Valent U.S.A. Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for use under average conditions when used strictly in accordance with the directions on the labeling. Valent does not make nor authorizes any agent or representative to make, any other warranty, guarantee or representation express or implied, concerning this product. Specifically, **NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE IS MADE.**

2. Critical and unforeseeable factors beyond Valent's control prevent it from eliminating all risks in connection with the use of this product. Such risks include, but are not limited to, damage to plants and crops to which product is applied, lack of complete control over the handling and application of this product, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit under average conditions for the uses stated on the labeling and even though label directions are followed. Buyer and user acknowledge and assume all risks and liability (except those assumed by Valent under 1 above) resulting from handling, storage, and use of the product.

3. Precautions stated on the labeling should be followed to avoid hazardous exposure to the product.

Valent U.S.A. Corporation © 1993

BOLERO® - Reg. TM of Kumiai Chemical Industry Co., Ltd. for thiobencarb herbicide.

Manufactured for
Valent U.S.A. Corporation
Walnut Creek CA 94596-8025
Form R207 11/1/93 EPA Est. 5905-GA-01
Made in U.S.A.
EPA Reg. No. 59639-79

BEST AVAILABLE COPY