



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

April 28, 2020

Robert L. Hamilton  
Sr. Regulatory Scientist  
Valent U.S.A. LLC  
1600 Riviera Ave., Suite 200  
Walnut Creek, CA 94596

Subject: Registration Review Label Mitigation for Thiobencarb/Label Amendment –  
Revise Label to Correct Typographical Errors  
Product Name: Bolero® 8EC Herbicide  
EPA Registration Number: 59639-79  
Application Date: 03/06/2019;02/21/2020  
Decision Number: 549421; 560074

Dear Mr. Hamilton:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Thiobencarb Interim Decision, and has concluded that your submission is acceptable. The agency also completed review of your amended label referred to above, submitted in connection with registration under FIFRA, as amended, and has determined the label is also acceptable.

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.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Marc Sheahin by phone at 703-347-8639, or via email at [sheahin.marc@epa.gov](mailto:sheahin.marc@epa.gov).

A handwritten signature in black ink that reads "Shaja B. Joyner". The signature is written in a cursive style with a large initial 'S'.

Shaja B. Joyner, Product Manager 20  
Fungicide-Herbicide Branch  
Registration Division 7505P

Enclosure



**ACCEPTED**  
 04/28/2020  
 Under the Federal Insecticide, Fungicide  
 and Rodenticide Act as amended, for the  
 pesticide registered under  
 EPA Reg. No. 59639-79

**THIOBENCARB    GROUP 8    HERBICIDE**

REDLINE COPY

(MASTER LABEL)

[Bracketed text is optional]

**BOLERO® 8 EC  
 (HERBICIDE)**

Active Ingredient	By Wt
Thiobencarb* .....	84%
Other Ingredients .....	16%
Total	100%

\*S-[(4-chlorophenyl)methyl] diethylcarbamothioate

Bolero® 8 EC Herbicide is an emulsifiable concentrate containing 8 lb thiobencarb per gallon.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**SEE NEXT [PAGE][PANEL] FOR ADDITIONAL PRECAUTIONARY STATEMENTS**

EPA Reg. No. 59639-79

[Sub Label 1]

Bolero® 8 EC Herbicide  
For use on rice except in California.



THIOBENCARB    GROUP    8    HERBICIDE

**Not for Use in California**

[Bracketed text is optional]

**BOLERO® 8 EC  
(HERBICIDE)**

Active Ingredient	By Wt
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**CAUTION**

**SEE NEXT [PAGE][PANEL] FOR ADDITIONAL PRECAUTIONARY STATEMENTS**

EPA Reg. No. 59639-79

**NET CONTENTS 15 GALLONS**

<b>FIRST AID</b>	
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• <b>DO NOT</b> induce vomiting unless told to by a poison control center or doctor.</li> <li>• <b>DO NOT</b> give anything by mouth to an unconscious person.</li> </ul>
<b>If Inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact <b>800-892-0099</b> for emergency medical treatment information.	
<b>NOTE TO PHYSICIAN</b>	
Thiobencarb is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine is antidotal.	

### **PRECAUTIONARY STATEMENTS**

#### **HAZARDS TO HUMANS & DOMESTIC ANIMALS**

**CAUTION:** Harmful if swallowed or inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Users should wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and Flaggers using enclosed cabs or enclosed cockpits must wear:** long-sleeved shirt and long pants, shoes plus socks.

**Mixers and Loaders must wear:** coveralls over long-sleeved shirt and long pants, chemical-resistant gloves made out of Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils or Viton ≥ 14 mils, chemical-resistant apron, and shoes plus socks.

**For other handling activities and in case of a spill or other emergency exposure, handlers must wear:** coveralls over long-sleeved shirt and long pants, chemical-resistant gloves made out of Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils or Viton ≥ 14 mils, chemical-resistant footwear and chemical-resistant apron, when cleaning equipment.

**All workers must wear:** waterproof boots plus socks when entering flooded fields following treatment.

## USER SAFETY REQUIREMENTS

**Discard clothing or other absorbent material 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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Control Statements:** When making application of Bolero® 8 EC Herbicide using aerial application equipment, mixers and loaders are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4)). Applicators and flaggers are required to use enclosed cabs or enclosed cockpits. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(5-6)).

### USER SAFETY RECOMMENDATIONS

- 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 gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## ENVIRONMENTAL HAZARDS

This product is toxic to shrimp. For terrestrial uses, do not apply directly to water except as directed on this label, 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.

## NON-TARGET ORGANISM ADVISORY STATEMENT

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

The use of *Bolero* 8 EC Herbicide 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 Herbicide will not be applied aurally 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 Herbicide 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. If 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.

**In Louisiana, DO NOT apply this product south of the Intracoastal Waterway.**

**In Texas, DO NOT apply this product within two (2) miles from the shorelines of Matagorda Bay or within two (2) miles from the shorelines of Galveston Bay.**

**PHYSICAL OR CHEMICAL HAZARDS**

Combustible. **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 indirectly 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 entry within 12 hours after application to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil or water is: coveralls, chemical-resistant gloves made of any waterproof material, and waterproof boots plus socks.



**DISCLAIMER, RISKS OF USING THIS PRODUCT,  
LIMITED WARRANTY  
AND LIMITATION OF LIABILITY**

**IMPORTANT:** Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.

**RISKS OF USING THIS PRODUCT**

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND AGREES THAT TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

To the extent consistent with applicable law, Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. To the extent consistent with applicable law, Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

**LIMITED WARRANTY**

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and **subject to the Risks of Using This Product as described above. To the extent consistent with applicable law AND EXCEPT AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED.** No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

**LIMITATION OF LIABILITY**

To the extent consistent with applicable law, Valent or Seller is not liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

**PROMPT NOTICE OF CLAIM**

To the extent consistent with applicable law allowing such requirements Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is latter, so that an immediate inspection of the affected property and growing crops can be made.

To the extent consistent with applicable law, if Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

**NO AMENDMENTS**

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing Disclaimer, Risks of Using This Product, Limited Warranty and Limitation of Liability, which may not be modified by any oral or written agreement.

**TANK MIXES**

NOTICE: Tank mixing of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor, consistent with applicable law.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

## Resistance Management

For resistance management, *Bolero* 8EC Herbicide is a Group 8 herbicide. Any weed population may contain or develop plants naturally resistant to *Bolero* 8EC Herbicide and other Group 8 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of *Bolero* 8EC Herbicide or other Group 8 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Fields should be scouted prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective. Fields should be scouted after application to verify that the treatment was effective. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes or to find out if suspected resistant weeds have been found in their region.

For further information or to report lack of performance or suspected resistance, contact Valent U.S.A. LLC at 800-6-VALENT (682-5368).

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## PRODUCT INFORMATION

*Bolero* 8 EC Herbicide applied pre-plant, late preemergence or postemergence will control many weeds in rice. *Bolero* 8 EC Herbicide will provide residual control of some weeds up to 5 weeks following application. Temporary injury to seedling rice may occur under certain conditions.

### Restrictions

- **DO NOT** apply more than 4 pt (4 lb ai) of *Bolero* 8 EC Herbicide per acre per year.
- **DO NOT** apply more than 1 *Bolero* 8 EC Herbicide application per acre per year.
- **DO NOT** apply more than 2-1/2 pt (2.5 lb ai/A) of *Bolero* 8 EC Herbicide per acre per year when using aerial application equipment east of the Rocky Mountains.
- **DO NOT** apply *Bolero* 8 EC Herbicide to fields with exposed seed as exposed seed will be killed.
- **DO NOT** apply to stressed rice.
- **DO NOT** apply *Bolero* 8 EC Herbicide as a preemergence treatment to cracked soil.
- **DO NOT** apply *Bolero* 8 EC Herbicide through any type of irrigation system.
- **DO NOT** apply to rice paddies where commercial catfish or crayfish farming is practiced.
- **DO NOT** apply this product on rice fields adjacent to catfish or crayfish ponds.
- **DO NOT** permit drift into catfish, crayfish, shrimp or minnow ponds.
- **DO NOT** release permanent flood water within 14 days (19 days east of the Rocky Mountains) of application of this product (where weather permits) when applying to rice fields.
- **DO NOT** apply this product within 24 hours of rainfall, or when heavy rain is expected to occur within 24 hours.
- **DO NOT** mix/load or otherwise handle *Bolero* 8 EC Herbicide within 100 feet of aquatic habitat.
- **DO NOT** apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops rendered unfit for sale, use or consumption.
- **DO NOT** drift to non-target areas.
- **DO NOT** apply when temperatures exceed 95°F.
- **DO NOT** overlap or double spray ends of field.
- **DO NOT** apply to a second stubble rice crop.
- **DO NOT** use water drained directly from treated fields to irrigate other crops.
- **DO NOT** apply *Bolero* 8 EC Herbicide in combination with propanil within 14 days before or after organophosphate or carbamate insecticide application.
- **DO NOT** use *Bolero* 8 EC Herbicide on rice grown in fields which have been land leveled resulting in severe cuts and heavily filled areas (does not apply to normal maintenance leveling) in the past 18 months.
- **DO NOT** use *Bolero* 8 EC Herbicide on water-seeded rice grown in fields which have received chicken litter or had large amounts of green vegetative residue incorporated in the past 10 months.
- **DO NOT** mix this product with any product containing a label prohibition against such mixing.
- **DO NOT** use this product to impregnate fertilizer.

## PRECAUTIONS

- Application to stressed rice can result in stand reductions, 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 (e.g., Zn deficiency, high salt content, high pH), excessive moisture (e.g., above field capacity while rice seed is germinating); drought conditions, poor field drainage; deep water after application, or application of herbicide(s) either before or after *Bolero* 8 EC Herbicide application. Stress management practices include determining rice plant vigor by inspecting both top growth and root growth before applying herbicides.
- Use of liquid nitrogen, zinc, surfactants or other spray additives with *Bolero* 8 EC Herbicide is at the sole risk of the user.

## ROTATIONAL RESTRICTIONS

**DO NOT** plant subsequent crops in treated fields within 6 months of last application.

## Environmental Conditions and Biological Performance

*Bolero* 8 EC Herbicide is used as an integral part of a weed control program and must be used in conjunction with a resistance management strategy (see “Resistance Management Recommendations” statement in this label). The mode of action is the inhibition of lipid synthesis. *Bolero* 8 EC Herbicide will, in most cases, prevent the emergence of susceptible weeds if application is made to a clean well-prepared seedbed. For optimum results from an application made prior to the emergence of susceptible weeds, rainfall or irrigation is needed to move *Bolero* 8 EC Herbicide into the soil.

**Table 1. Soil Characteristics and Application Rates**

<b>SOIL TEXTURE</b>	<b><i>BOLERO</i> 8 EC HERBICIDE RATES PER ACRE pt/A</b>
COARSE: sandy loam	2.5 to 3 (2.5 to 3 lb of ai/A)
MEDIUM: loam, silt loam, silt, sandy clay loam	3 to 4 (3 to 4 lb of ai/A)
FINE: clay, clay loam, sandy clay, silty clay, silty clay loam,	3 to 4 (3 to 4 lb of ai/A)

## Mixing and Spraying Equipment Preparation

**Restriction:** **DO NOT** use chlorine bleach with ammonia. Remove all traces of liquid fertilizer containing any form of ammonia or ammonium before adding any chlorine source including chlorine bleach.

Prior to using *Bolero* 8 EC Herbicide thoroughly drain, clean and rinse all mixing and spraying equipment that will come in contact with *Bolero* 8 EC Herbicide. Follow the cleanup directions of the manufacturer of the previously sprayed product. Failure to remove all deposits of previously sprayed products may result in collection of *Bolero* 8 EC Herbicide residues and inhibit cleanup of mixing and spraying equipment after *Bolero* 8 EC Herbicide use.

**Precaution:** Failure to remove all deposits of previously sprayed products may also result in reduced efficacy of *Bolero* 8 EC Herbicide and/or crop injury.

## **SPRAYER CLEANOUT**

Residual amounts of herbicide in/on mixing or spraying equipment may have an adverse effect on subsequently sprayed crops. Thoroughly drain, clean and rinse all mixing and spraying equipment (including tanks, booms, hoses, strainers, screens and nozzles) immediately after use. Use the following procedure:

1. Remove all physical residue.
2. Thoroughly drain and rinse tanks, booms and hoses with clean water.
3. Fill the tank one-half full of clean water and use a spraying/mixing tank cleaner that does not contain chlorine. Let agitate/re-circulate according to the directions of the cleaner manufacturer. Thoroughly flush the boom and hoses before draining.
4. Rinse all hoses, tanks, nozzles, strainers and booms with clean water to remove the tank cleaner. Follow the directions provided by the tank cleaner manufacturer.
5. Remove the strainers, nozzles and screen and clean separately.
6. Replace the strainer(s), nozzles and screens.
7. Thoroughly rinse the tank with clean water and flush the water through the boom, nozzles and hoses.
8. Dispose of the rinsate on site or at an approved waste disposal facility.

## **Mixing Instructions**

1. Fill the tank one-half full of clean water.
2. Begin agitation.
3. If foaming is anticipated, add defoamer prior to the addition of the surfactant. Add the required amount of *Bolero* 8 EC Herbicide.
4. Add tank mix partner (*if any*) in the following order:
  - a. Water soluble packets (preferably added before the surfactant)
  - b. Water dispersible granules/wettable powder
  - c. Soluble powders/UAN
  - d. Suspension concentrate
  - e. Emulsifiable concentrate
5. Fill the remainder of the tank.
6. Mix only the amount of spray solution that can be applied the day of mixing. *Bolero* 8 EC Herbicide must be applied within 12 hours of mixing.

## **Application Equipment**

Ensure application equipment is clean and in good repair, nozzles are uniformly spaced on the boom and frequently checked for accuracy. Nozzle selection must meet manufacturer's gallonage and pressure guidelines for application.



## SPRAY DRIFT

### Aerial Applications:

- **DO NOT** release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 10 mph at the application site. The boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- **DO NOT** apply during temperature inversions.

### Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

## SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

## IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

### Controlling Droplet Size – Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### Controlling Droplet Size – Aircraft

- Adjust Nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

## BOOM HEIGHT – Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

## RELEASE HEIGHT – Aircraft

Higher release heights increase the potential for spray drift.



**SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

**TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

**TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

**WIND**

Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.**

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

**Sensitive Areas**

The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

For additional information on sensitive areas, please see the “ENVIRONMENTAL HAZARDS” section of this label.

**USE INSTRUCTIONS**  
**BOLERO 8 EC HERBICIDE APPLICATION RATES AND TIMING TO RICE**

Application Rate pt/A	Special Instructions
4 (4.0 lb ai/A)	<p><b>Water-Seeded Rice - Red Rice Suppression and Sprangletop Control (Preplant, non-incorporated)</b></p> <ul style="list-style-type: none"> <li>• Apply <i>Bolero</i> 8 EC Herbicide to a well prepared seedbed which preferably has been mechanically ridged and has had drains plowed.</li> <li>• Make application immediately after soil preparation (before any weed germination). If rain occurs after soil preparation, <i>Bolero</i> 8 EC Herbicide must not be applied until the soil is dry enough to support tillage operations. Red Rice or Sprangletop plants which are not killed by seedbed preparation and Red Rice or Sprangletop seed which have germinated before <i>Bolero</i> 8 EC Herbicide application will not be controlled.</li> <li>• Flood the field between 2 and 3 days after the <i>Bolero</i> 8 EC Herbicide application.</li> <li>• Do not drag the field or disturb the treated seedbeds after flooding.</li> <li>• Seeding must not occur before 24 hours after the field has been brought to flood level. Refer to and follow State Extension Service guidelines regarding seeding rate, seeding time after flood and drainage of seeding flood.</li> <li>• Supplemental herbicides may be needed for season long weed control.</li> <li>• Rice in areas which do not completely drain when the seeding flood is removed may be injured or killed. [Refer to “Restrictions and Limitations section”. Begin drainage when the first leaf is about 1/4 to 1/2 inch long. For red rice suppression normal pin-point flood cultural practices (not flush or continuous flood culture) must be followed with the post seeding drainage period not to exceed 3 to 5 days. Preplant nitrogen enhances the program by promoting fast growth. The planting of early season varieties of rice as soon as possible after soil temperatures are favorable; fall preparation of rice land involving deep-plowing and subsequent shallow cultivations; and rotational schemes involving fallow, pasture and/or other non-crops, are essential for long-term integrated management of Red Rice, Sprangletop and other rice weeds. Rice injury and/or stand thinning may be evident, especially when germinating rice is subjected to stress conditions.]</li> </ul>
4 (4.0 lb ai/A)	<p><b>Drill Seeded Rice Only (Delayed Preemergence)<sup>1</sup></b></p> <ul style="list-style-type: none"> <li>• Apply <i>Bolero</i> 8 EC Herbicide to a well-prepared moist seedbed. Seal soil by flushing or rainfall prior to application of <i>Bolero</i> 8 EC Herbicide.</li> </ul>
4 (4.0 lb ai/A)	<p><b>Dry Seeded Rice (Postemergence)</b></p> <ul style="list-style-type: none"> <li>• Apply <i>Bolero</i> 8 EC Herbicide to moist soil or flooded fields.</li> <li>• Postemergence application to drill seeded rice can be made after emergence.</li> <li>• If tank mixing, follow tank mix partner’s timing and adjuvant directions.</li> </ul>

**USE INSTRUCTIONS**  
**BOLERO 8 EC HERBICIDE APPLICATION RATES AND TIMING TO RICE**

Application Rate pt/A	Special Instructions
4 (4.0 lb ai/A)	<p><b>Water-Seeded Rice (Postemergence)</b></p> <ul style="list-style-type: none"> <li>• Apply <i>Bolero</i> 8 EC Herbicide to moist soil or flooded fields.</li> <li>• Postemergence application may be made to rice that is in at least the 2-leaf (second leaf fully expanded) stage of growth.</li> </ul>
4 (4.0 lb ai/A)	<p><b>Tank Mix Application</b></p> <ul style="list-style-type: none"> <li>• <i>Bolero</i> 8 EC Herbicide may be applied in tank mix combination with labeled rates of products listed in Tables 2 and 3.</li> <li>• Always read and follow label instructions for all products. Follow most restrictive labeling.</li> </ul>
<ul style="list-style-type: none"> <li>• Refer to Table 4 for preemergence weeds controlled by <i>Bolero</i> 8 EC Herbicide.</li> </ul>	

<sup>1</sup> Rice seed must germinate (have a primary root at least 1/2 inch long) prior to *Bolero* 8 EC Herbicide application.

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.

**WATER MANAGEMENT**

After application, flush the fields as necessary to prevent crusting and drying of the soil. Flood fields as soon as the rice plants will tolerate permanent flooding. **DO NOT** release permanent flood water within 14 days (19 days east of the Rocky Mountains) after application.

**APPLICATION EQUIPMENT**

**Aircraft:** Apply *Bolero* 8 EC Herbicide in no less than 10 gallons spray mix per acre. See “Engineering Control Statements” when making aerial application of *Bolero* 8 EC Herbicide.

**Ground Sprayers:** Apply in a minimum of 10 gallons of total spray mix per acre.

The following herbicide products may be tank mixed with *Bolero* 8 EC Herbicide for delayed preemergence use in rice. Always read and follow label instructions for all products tank mixed with *Bolero* 8 EC Herbicide.

**Table 2. Preemergence Tank Mix Partners**

clomazone	imazethapyr (e.g. Newpath®)	quinclorac (e.g. Facet®)
glyphosate	clomazone + quinclorac (e.g. Obey™)	
imazosulfuron (e.g. League®)	pendimethalin	

The following herbicide products may be tank mixed with *Bolero* 8 EC Herbicide for postemergence use in rice.

**Table 3. Postemergence Tank Mix Partners**

2,4-D	triclopyr (e.g. Grandstand®)	clomazone + quinclorac (e.g. Obey™)
carfentrazone-ethyl (e.g. Aim® EC)	penxsulam (e.g. Grasp® SC)	propanil <sup>1,2</sup>
carfentrazone-ethyl + quinclorac (e.g. Broadhead®)	imazosulfuron (e.g. League®)	bispyribac-sodium (e.g. Regiment®)
quinclorac + imazethapyr (e.g. Clearpath®)	bensulfuron methyl (e.g. Londax®)	propanil + thiobencarb (e.g. RiceBeaux®)
cyhalofop (e.g. Clincher™ SF & Clincher™ CA)	imazethapyr (e.g. Newpath®)	fenoxaprop-p-ethyl (e.g. Ricestar® HT)
clomazone		

<sup>1</sup> 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.

<sup>2</sup> **DO NOT** mix liquid nitrogen or surfactants with *Bolero* 8 EC Herbicide alone or when mixed with propanil.

**Table 4. Preemergence Weeds Controlled and Suppressed**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Application Rate pt/A</b>
Barnyardgrass	<i>Echinochloa crus-galli</i>	4 (4.0 lb ai/A)
Broadleaf Signalgrass	<i>Urochloa platyphylla</i>	
Crabgrass, Large	<i>Digitaria sanguinalis</i>	
Dayflower	<i>Commelina communis</i>	
Ducksalad	<i>Heteranthera limosa</i>	
Eclipta	<i>Eclipta alba</i>	
Fall Panicum	<i>Panicum dichotomiflorum</i>	
False Pimpernel	<i>Lindernia dubia</i>	
Flatsedge		
Redroot	<i>Cyperus erythrorhizos</i>	
Rice	<i>Cyperus iria</i>	
Goosegrass	<i>Eleusine indica</i>	
Gooseweed	<i>Sphenoclea zeylanica</i>	
Horrahgrass	<i>Fimbristylis</i> spp.	
Junglerice	<i>Echinochloa colona</i>	
Red Rice <sup>1</sup>	<i>Oryza sativa</i>	
Redstem (Purple Ammannia)	<i>Ammannia coccinea</i>	
Spikerush		
Amazon	<i>Leptochloa panicoides</i>	
Bearded	<i>Leptochloa fascicularis</i>	
Waterhyssop	<i>Bacopa rotundifolia</i>	

<sup>1</sup>Suppression only – See “APPLICATION RATES AND TIMINGS”

## **DELAYED PHYTOTOXICITY SYNDROME (DPS)**

*Bolero* 8 EC Herbicide use in rice fields which develop anaerobic (low oxygen content) soil conditions following planting, in the presence of certain fungi that dechlorinate benzene rings (i.e. *Bolero* 8 EC Herbicide, propanil, 2,4-D, etc.), may reduce plant stand and yield. Anaerobic soil conditions are likely to occur when:

1. Green matter and crop residue is plowed down or worked into the soil prior to planting
2. Internal soil drainage is slow (poor percolation).
3. There is a continuous flood.
4. There are areas in the field which retain water during periods of prescribed flood removal.

Delayed Phytotoxic Syndrome (DPS), which occurs under low oxygen soil conditions, is associated with the following symptoms in rice plants:

1. Dark green foliage and/or
2. Reduced plant height and/or
3. Plant deformation

Be prepared to drain the treated field(s) to allow for soil oxygenation at the first symptoms of DPS.

Management practices which will help to minimize these situations and thereby promote good soil conditions for the production of healthy rice treated with *Bolero* 8 EC Herbicide are:

1. Destruction of previous crop and weed residues by:
  - a. Burning where state regulations allow.
  - b. Fall and winter plowing
  - c. Use of glyphosate or paraquat as a "burndown" to prevent vegetation buildup after initial ground preparation and prior to final seedbed preparation.
2. Application of fertilizer according to soil test results
  - a. **DO NOT** apply excess phosphorous.
3. Uniform leveling practices which eliminate low spots in the field and insure that the field is entirely drained for prescribed flood removal periods. This is far more difficult to achieve with the use of contour levees. Fields which have been precision leveled for perimeter ditches or straight levees are more suited to the intense water management practices required for the red rice suppression, pinpoint flood program.
4. Uniform flood depth of 2" to 4".
5. Not exceeding labeled rates of *Bolero* 8 EC Herbicide, accurate calibration of application equipment and eliminating application overlap.

## **Precaution**

Water-seeded rice fields treated with *Bolero* 8 EC Herbicide preplant or post flood must be inspected regularly through the stand establishment and seedling growth stages. If any of the Delayed Phytotoxicity Syndrome symptoms (associated with low oxygen soil conditions) occur (see section on DPS), immediately drain the flood and allow the soil to oxygenate (no standing water for 3 to 5 days) then reflood. Low spots which do not drain completely may continue to display phytotoxic symptoms. [Use of *Bolero* 8 EC Herbicide on rice fields which cannot be drained as necessary may result in phytotoxic symptoms and **is done at the sole risk of the user.**]

## STORAGE AND DISPOSAL

**DO NOT** contaminate water, food or feed by storage and disposal.

### 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 **800-892-0099**.

### PESTICIDE DISPOSAL

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

### CONTAINER HANDLING

Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

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*Bolero* and *Regiment* (EPA Reg No 59639-105) are registered trademarks of Kumiai Chemical Industry Co., Ltd.

*League* (EPA Reg No 59639-166) is a registered trademark of Valent U.S.A. LLC

*Aim EC* (EPA Reg No 279-3241), *Broadhead* (EPA Reg No 279-3366) and *Obey* (EPA Reg No 279-3409) are trademarks and registered trademarks of FMC Corporation

*Clearpath* (EPA Reg No 7969-222), *Facet* (EPA Reg No L 7969-315) and *Newpath* (EPA Reg No 241-412) are registered trademarks of BASF

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Manufactured for:

**Valent U.S.A. LLC**

P. O. Box 8025

Walnut Creek CA 94596-8025

Made in U.S.A.

EPA Reg. No. 59639-79

EPA Est. No.

059639-00079.20200422.BOL8EC.AMEND\_ID.Clean

[Sub Label 2]

Bolero® 8EC Herbicide

For use on rice in California

*[Alternate Brand Name: Abolish® 8 EC Rice Herbicide]*





THIOBENCARB | GROUP **8** | HERBICIDE

For Use in California Only.

[Bracketed text is optional]

Note: ***Bold italicized text*** is information for the reader and is not part of the label.

# BOLERO® 8 EC (HERBICIDE)

Active Ingredient	By Wt
Thiobencarb* .....	84%
Other Ingredients .....	<u>16%</u>
Total	100%

\*S-[(4-chlorophenyl)methyl] N,N-diethylcarbamothioate

Bolero® 8 EC Herbicide is an emulsifiable concentrate containing 8 lb thiobencarb per gallon.

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

**SEE NEXT [PAGE][PANEL] FOR ADDITIONAL PRECAUTIONARY STATEMENTS**

EPA Reg. No. 59639-79

**NET CONTENTS     5 GALLONS  
                             15 GALLONS**

<b>FIRST AID</b>	
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• <b>DO NOT</b> induce vomiting unless told to by a poison control center or doctor.</li> <li>• <b>DO NOT</b> give anything by mouth to an unconscious person.</li> </ul>
<b>If Inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact <b>800-892-0099</b> for emergency medical treatment information.	
<b>NOTE TO PHYSICIAN</b>	
Thiobencarb is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine is antidotal.	

### **PRECAUTIONARY STATEMENTS**

#### **HAZARDS TO HUMANS & DOMESTIC ANIMALS**

**CAUTION:** Harmful if swallowed or inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing spray mist. Users should wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE):**

**Mixers and Loaders must wear:** coveralls over long-sleeved shirt and long pants, chemical-resistant apron, shoes plus socks and chemical-resistant gloves made out of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, or Viton ≥ 14 mils.

**Applicators must wear:** long-sleeved shirt and long pants, shoes plus socks. Applicators must use an enclosed cab or cockpit.

**For other handling activities and in case of a spill or other emergency exposure, handlers must wear:** coveralls over long-sleeved shirt and long pants, chemical-resistant gloves made out of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, or Viton ≥ 14 mils, chemical-resistant footwear and chemical-resistant apron when cleaning equipment.

**All workers must wear:** waterproof boots plus socks when entering flooded fields following treatment.

## USER SAFETY REQUIREMENTS

**Discard clothing or other absorbent material that has 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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Control Statements:** When making application of Bolero® 8 EC Herbicide using aerial application equipment, mixers and loaders are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4)). Applicators and flaggers are required to use enclosed cockpits. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(5-6)).

### USER SAFETY RECOMMENDATIONS

- 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 gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## ENVIRONMENTAL HAZARDS

This product is toxic to shrimp. For terrestrial uses, **DO NOT** apply directly to water except as directed on this label, 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.

## NON-TARGET ORGANISM ADVISORY STATEMENT

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

## ENDANGERED SPECIES

The National Marine Fisheries Service has determined that thiobencarb, when used in California according to the label and existing restricted materials permit conditions, is not likely to jeopardize the continued existence of endangered or threatened salmonid species, nor is it likely to destroy or adversely modify designated critical habitat of these species. To ensure and continue the proper use of thiobencarb on rice in California, you must follow the measures contained in the Endangered Species Protection Bulletin for the county in which you are applying the product. To obtain Bulletins, no more than six months before using this product, consult <http://www.epa.gov/espp/> or call 800-447-3813. You must use the Bulletin valid for the month in which you will apply the product. The use limitations in the Bulletins and linked Mandatory Pesticide Use Limitations document are adapted from those currently in force for thiobencarb under the restricted materials permit conditions of the California Department of Pesticide Regulation, with enforcement by the County Agricultural Commissioners.

## **PHYSICAL OR CHEMICAL HAZARDS**

Combustible. **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 entry within 12 hours after application to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil or water is: coveralls, chemical-resistant gloves made of any waterproof material, and waterproof boots plus socks.

**DISCLAIMER, RISKS OF USING THIS PRODUCT,  
LIMITED WARRANTY  
AND LIMITATION OF LIABILITY**

**IMPORTANT:** Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.

**RISKS OF USING THIS PRODUCT**

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND AGREES THAT TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

To the extent consistent with applicable law, Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. To the extent consistent with applicable law, Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

**LIMITED WARRANTY**

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and **subject to the Risks of Using This Product as described above. To the extent consistent with applicable law AND EXCEPT AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED.** No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

**LIMITATION OF LIABILITY**

To the extent consistent with applicable law, Valent or Seller is not liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT.

**PROMPT NOTICE OF CLAIM**

To the extent consistent with applicable law allowing such requirements Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is latter, so that an immediate inspection of the affected property and growing crops can be made.

To the extent consistent with applicable law, if Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

**NO AMENDMENTS**

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing Disclaimer, Risks of Using This Product, Limited Warranty and Limitation of Liability, which may not be modified by any oral or written agreement.

**TANK MIXES**

NOTICE: Tank mixing of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor, consistent with applicable law.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

## Resistance Management

For resistance management, *Bolero* 8EC Herbicide is a Group 8 herbicide. Any weed population may contain or develop plants naturally resistant to *Bolero* 8EC Herbicide and other Group 8 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of *Bolero* 8EC Herbicide or other Group 8 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Fields should be scouted prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective. Fields should be scouted after application to verify that the treatment was effective. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes or to find out if suspected resistant weeds have been found in their region.

For further information or to report lack of performance or suspected resistance, contact Valent U.S.A. LLC at 800-6-VALENT (682-5368).

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## PRODUCT INFORMATION

*Bolero* 8 EC Herbicide applied preplant, late preemergence or postemergence will control many weeds in rice. *Bolero* 8 EC Herbicide will provide residual control of some weeds up to 5 weeks following application. For water seeded rice, apply to non-flooded fields up to 3 to 5 leaf rice. Soils must be sealed and wet at the time of application. *Bolero* 8 EC Herbicide may be applied to flooded rice after the 5 leaf stage.

### RESTRICTIONS

- **DO NOT** apply more than 4 pt (4 lb ai) of *Bolero* 8 EC Herbicide per acre per year.
- **DO NOT** apply more than 1 *Bolero* 8 EC Herbicide applications per acre per year.
- **DO NOT** make application before rice is in the second leaf stage of development.
- **DO NOT** apply *Bolero* 8 EC Herbicide to fields with exposed seed as exposed seed will be killed.
- **DO NOT** apply to stressed rice or second crop (stubble crop) rice. For additional water-seeded precautions refer to management practices for the preplant water-seeded uses of *Bolero* 8 EC Herbicide.
- **DO NOT** apply *Bolero* 8 EC Herbicide as a preemergence treatment to cracked soil.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply this product on rice fields adjacent to catfish or crayfish ponds.
- **DO NOT** apply this product within 24 hours of rainfall, or when heavy rain is expected to occur within 24 hours.
- **DO NOT** use *Bolero* 8 EC Herbicide with the pin-point flood cultural method on high alkali soils.
- **DO NOT** mix/load or otherwise handle this product within 100 feet of aquatic habitat.
- **DO NOT** apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops rendered unfit for sale, use or consumption.
- **DO NOT** allow to drift to non-target areas.
- **DO NOT** apply when temperatures exceed 95°F.
- **DO NOT** overlap or double spray ends of field.
- **DO NOT** use water drained directly from treated fields to irrigate other crops.
- **DO NOT** apply *Bolero* 8 EC Herbicide in combination with propanil within 14 days before or after organophosphate or carbamate insecticide application.
- **DO NOT** use *Bolero* 8 EC Herbicide on rice grown in fields which have been land leveled resulting in severe cuts and heavily filled areas (does not apply to normal maintenance leveling) in the past 18 months.
- **DO NOT** use *Bolero* 8 EC Herbicide on water-seeded rice grown in fields which have received chicken litter or had large amounts of green vegetative residue incorporated in the past 10 months.
- **DO NOT** mix this product with any product containing a label prohibition against such mixing.
- **DO NOT** use this product to impregnate fertilizer.

## PRECAUTIONS

- Temporary injury to seedling rice may occur under certain conditions.
- Application to stressed rice can result in stand reductions, 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 (e.g., Zn deficiency, high salt content, high pH), excessive moisture (e.g., above field capacity while rice seed is germinating); drought conditions, poor field drainage; deep water after application, or application of herbicide(s) either before or after *Bolero 8 EC* Herbicide application. Stress management practices include determining rice plant vigor by inspecting both top growth and root growth before applying herbicides.
- The use of liquid nitrogen, zinc, surfactants or other spray additives with *Bolero 8 EC* Herbicide is done at the sole risk of the user.
- When applying to rice fields, follow directions in the Water Management section of this label.

## ROTATIONAL RESTRICTIONS

**DO NOT** plant subsequent crops in treated fields within 6 months of last application.

### Mixing and Spraying Equipment Preparation

**Restriction:** **DO NOT** use chlorine bleach with ammonia. Remove all traces of liquid fertilizer containing any form of ammonia or ammonium before adding any chlorine source including chlorine bleach.

Prior to using *Bolero 8 EC* Herbicide thoroughly drain, clean and rinse all mixing and spraying equipment that will come in contact with *Bolero 8 EC* Herbicide. Follow the cleanup directions by the manufacturer of the previously sprayed product. Failure to remove all deposits of previously sprayed products may result in collection of *Bolero 8 EC* Herbicide residues and inhibit cleanup of mixing and spraying equipment after *Bolero 8 EC* Herbicide use.

**Precaution:** Failure to remove all deposits of previously sprayed products may also result in reduced efficacy of *Bolero 8 EC* Herbicide and/or crop injury.

## SPRAYER CLEANOUT

Residual amounts of herbicide in/on mixing or spraying equipment may have an adverse effect on subsequently sprayed crops. Thoroughly drain, clean and rinse all mixing and spraying equipment (including tanks, booms, hoses, strainers, screens and nozzles) immediately after use. Use the following procedure:

1. Remove all physical residue.
2. Thoroughly drain and rinse tanks, booms and hoses with clean water.
3. Fill the tank one-half full of clean water and use a spraying/mixing tank cleaner that does not contain chlorine. Let agitate/re-circulate according to the directions of the cleaner manufacturer. Thoroughly flush the boom and hoses before draining.
4. Rinse all hoses, tanks, nozzles, strainers and booms with clean water to remove the tank cleaner. Follow the directions provided by the tank cleaner manufacturer.
5. Remove the strainers, nozzles and screen and clean separately.
6. Replace the strainer(s), nozzles and screens.
7. Thoroughly rinse the tank with clean water and flush the water through the boom, nozzles and hoses.
8. Dispose of the rinsate on site or at an approved waste disposal facility.

### Mixing Instructions

1. Fill the tank one-half full of clean water.
2. Begin agitation.
3. If foaming is anticipated, add defoamer prior to the addition of the surfactant. Add the required amount of *Bolero 8 EC* Herbicide.
4. Add tank mix partner (*if any*) in the following order:
  - Water soluble packets (preferably added before the surfactant)
  - Water dispersible granules/wettable powder
  - Soluble powders/UAN
  - Suspension concentrate
  - Emulsifiable concentrate
5. Fill the remainder of the tank.
6. Mix only the amount of spray solution that can be applied the day of mixing.
7. *Bolero 8 EC* Herbicide must be applied within 12 hours of mixing.

### Application Equipment

- Ensure application equipment is clean and in good repair, nozzles are uniformly spaced on the boom and frequently checked for accuracy. Nozzle selection must meet manufacturer's gallonage and pressure guidelines for application.

#### SPRAY DRIFT

##### Aerial Applications:

- **DO NOT** release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 10 mph at the application site. The boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- **DO NOT** apply during temperature inversions.

##### Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

### SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

### **Controlling Droplet Size – Ground Boom**

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### **Controlling Droplet Size – Aircraft**

- Adjust Nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

### **BOOM HEIGHT – Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

### **RELEASE HEIGHT – Aircraft**

Higher release heights increase the potential for spray drift.

### **SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

### **WIND**

Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.**

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

**SENSITIVE AREAS:** Apply the pesticide only when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

For additional information on sensitive areas, please see the "ENVIRONMENTAL HAZARDS" section of this label.

**USE INSTRUCTIONS**  
**BOLERO 8 EC HERBICIDE APPLICATION RATES AND TIMING TO RICE**

<b>Application Rate</b>	<b>Special Instructions</b>
2 qt/A (4.0 lb ai/A)	<b>Dry-Seeded Rice Early Postemergence Application – Non-Flooded</b> <ul style="list-style-type: none"><li>• For control of emerged watergrass.</li><li>• Apply 2 quarts of <i>Bolero</i> 8 EC Herbicide per acre when watergrass has developed no further than the 3 leaf stage.</li><li>• When making application to drill-seeded rice, application may be made any time after germination (usually 5 to 9 days after seeding).</li><li>• The application to broadcast seeded rice (seed exposed) must <b>NOT</b> be made before the rice is in the 1-1/2 leaf stage; rice plant growth must be fully supported by the root system with no dependence on the starchy endosperm in the seed. Apply to moist soil.</li></ul>

**USE INSTRUCTIONS**  
**BOLERO 8 EC HERBICIDE APPLICATION RATES AND TIMING TO RICE**

Application Rate	Special Instructions
<p style="text-align: center;">2 qt/A (4.0 lb ai/A)</p>	<p><b>Water-Seeded Rice - Preplant Non-Incorporated - Non-Flooded</b></p> <ul style="list-style-type: none"> <li>• For control of watergrass at the 3 leaf stage or less, sprangletop 2-1/2 leaf or 3/4 to 1 inch in height, whichever is smaller, and smallflower umbrellaplant up to 1/2 inch in height:</li> <li>• Apply 2 quarts of <i>Bolero 8 EC</i> Herbicide per acre to a well prepared seedbed free of large clods, and which preferably has been rolled with a creaser and has had drains plowed.</li> <li>• Make application immediately after soil preparation (before any weed germination).</li> <li>• If rain occurs after soil preparation, <i>Bolero 8 EC</i> Herbicide must not be applied until there is no standing water in the field and the soil is dry enough to support tillage operations.</li> <li>• Watergrass, sprangletop and smallflower umbrellaplant which are not killed by seedbed preparation, or germinate and reach the above specified size before application of <i>Bolero 8 EC</i> Herbicide, will not be controlled.</li> <li>• Apply <i>Bolero 8 EC</i> Herbicide as the last product to the field prior to flooding.</li> <li>• The preplant <i>Bolero 8 EC</i> Herbicide application during cool periods may result in decreased control of smallflower umbrellaplant due to a prolonged period of weed germination.</li> <li>• For maximum residual activity, flood the field for seeding 1 to 5 days after application of <i>Bolero 8 EC</i> Herbicide.</li> <li>• <b>DO NOT</b> drag the field or disturb the treated seedbed after flooding.</li> <li>• To minimize possible phytotoxicity, seeding must <b>not</b> occur before 24 hours after the field has been brought to flood level.</li> <li>• Maintain water level in the checks at about 3 to 4 inches with no exposed soil. Allowing water to recede or a prolonged soil exposure will result in loss of weed control. Excessively deep water will result in plant injury.</li> <li>• Rice injury and/or stand thinning may be evident, especially when germinating rice is subjected to stress conditions.</li> <li>• Supplemental herbicides may be needed for season long weed control.</li> <li>• Preplant nitrogen enhances the program by promoting fast rice growth.</li> <li>• The planting of early season varieties of rice as soon as possible after soil temperatures are favorable; fall preparation of rice land involving deep-plowing and subsequent shallow cultivations; and rotational schemes involving fallow, pasture and/or other crops, are advised for long-term integrated management of rice weeds. This is an intense management program in which weed control is a result of <i>Bolero 8 EC</i> Herbicide and water management.</li> <li>• Refer to management practices for the water-seeded uses of <i>Bolero 8 EC</i> Herbicide and precautions.</li> </ul>

**USE INSTRUCTIONS**  
**BOLERO 8 EC HERBICIDE APPLICATION RATES AND TIMING TO RICE**

Application Rate	Special Instructions
<p style="text-align: center;">2 qt/A (4.0 lb ai/A)</p>	<p><b>Postemergence Pin-Point Flood Culture - Non-Flooded</b></p> <ul style="list-style-type: none"> <li>• For control of watergrass 3 leaf or less, sprangletop less than 2-1/2 leaf or 3/4 to 1 inch in height, whichever is smaller, and smallflower umbrellaplant up to 1/2 inch in height: After seeding rice into the initial flood do not drain water for 2 days or until the rice seedling has pegged to the soil.</li> <li>• Apply 2 quarts of <i>Bolero</i> 8 EC Herbicide per acre after draining and there is no standing water in the field. The presence of standing water at the time of application can result in a severe stand reduction in those areas. <b>The rice seedling must be at least 1-1/2 leaf and its growth must be fully supported by the root system with no dependence on the starchy endosperm in the seed.</b></li> <li>• Initiate pin-point flood no later than 5 to 7 days after the application of <i>Bolero</i> 8 EC Herbicide. Fields drained for 5 to 7 days can minimize or eliminate treatments for tadpole shrimp and midge control, but the water must be completely off the field for that duration of time. Delaying flooding beyond the instructed interval can result in loss of weed control and stress on the rice plants which can potentially favor disease incidence.</li> <li>• Maintain pin-point flood depth with no exposed soil. Excessively deep water can result in rice injury or death. <b>DO NOT</b> use <i>Bolero</i> 8 EC Herbicide with the pin-point flood cultural method on high alkali soils. This is an intense management program in which weed control is a result of <i>Bolero</i> 8 EC Herbicide and water management.</li> </ul>
<p style="text-align: center;">2 to 3 pt/A (2 to 3 lb ai/A)</p> <p style="text-align: center;">+</p> <p style="text-align: center;">Regiment® CA Herbicide (bispyribac-sodium) 0.53 to 0.67 oz/A (0.0265 to 0.0335 lb ai/A)</p>	<p><b>Postemergence Flood Culture – Flooded</b></p> <ul style="list-style-type: none"> <li>• For control of watergrass at greater than the 3 leaf stage, sprangletop greater than 2-1/2 inches in height, and smallflower umbrellaplant greater than 1/2 inch in height, a tank mix of <i>Bolero</i> 8 EC Herbicide plus <i>Regiment</i> CA Herbicide may be applied to 5 leaf rice or greater.</li> <li>• The use rate for <i>Bolero</i> 8 EC Herbicide is 2 to 3 pints per acre.</li> <li>• For <i>Regiment</i> CA Herbicide the use rate is 0.53 to 0.67 oz/A.</li> <li>• No adjuvant is necessary.</li> <li>• Prior to application, the floodwater must be lowered so that 70% of the weed plant surface is above the floodwater. Failure to do so will result in insufficient weed control. Bring the field to normal flood level 2 to 3 days after application.</li> <li>• Read and carefully observe the label claims, precautions or restrictions, rates and all other information on the labels of products to be used in tank mixture. Use according to the most restrictive label directions of each product in the mixture.</li> <li>• Refer to management practices for the water-seeded uses of <i>Bolero</i> 8 EC Herbicide and precautions.</li> </ul>



**USE INSTRUCTIONS**  
**BOLERO 8 EC HERBICIDE APPLICATION RATES AND TIMING TO RICE**

Application Rate	Special Instructions
<p style="text-align: center;">3 pt/A (3 lb ai/A)</p>	<p><b>Early Postemergence Application - Non-Flooded - On Rice Grown In Decomposed Granitic Soils</b></p> <ul style="list-style-type: none"> <li>• Rice grown on soils primarily in the areas east of California highways 70 and 99 is subject to Delayed Phytotoxic Syndrome (DPS) following application of <i>Bolero</i> 8 EC Herbicide at the higher specified rates of application.</li> <li>• DPS which occurs under low oxygen soil conditions is associated with the following symptoms in rice plants:               <ol style="list-style-type: none"> <li>1. Dark green foliage and/or</li> <li>2. Reduced plant height and/or</li> <li>3. Plant deformation</li> </ol> </li> <li>• Be prepared to drain the treated fields to allow for soil oxygenation at the first symptoms of DPS.</li> <li>• For control of watergrass at less than the 3 leaf stage, sprangletop at less than the 2-1/2 leaf stage or 3/4 to 1 inch in height, whichever is smaller, and smallflower umbrellaplant at less than 1/2 inch in height.</li> <li>• Apply 3 pints of <i>Bolero</i> 8 EC Herbicide per acre when rice is in at least the 1-1/2 leaf stage and its growth is fully supported by the root system with no dependence on the starchy endosperm in the seed.</li> <li>• Reduction of <i>Bolero</i> 8 EC Herbicide application rate to 3 pints per acre may reduce, but will not eliminate the possibility of DPS.</li> <li>• <b>DO NOT</b> apply if rice exhibits symptoms of stress.</li> <li>• The variety Cal Pearl may react adversely to some stress conditions more than other varieties.</li> <li>• Cold weather during the planting season may result in decreased control of smallflower umbrellaplant due to a prolonged period of weed germination.</li> <li>• Use of <i>Bolero</i> 8 EC Herbicide at 3 pints per acre will not provide the same degree of weed control as the full rate, and may require applications of other herbicides to achieve desired weed control.</li> <li>• Follow the Management Practices section for the water-seeded uses of <i>Bolero</i> 8 EC Herbicide.</li> </ul>
<p><b>APPLICATION METHOD</b>            Uniformly apply <i>Bolero</i> 8 EC Herbicide by aircraft in no less than 10 gallons per acre of total spray mixture, or by ground equipment in 10 to 20 gallons per acre of total spray mixture.</p>	



## MANAGEMENT PRACTICES FOR THE WATER-SEEDED USES OF *BOLERO 8 EC* HERBICIDE

*Bolero 8 EC* Herbicide use in rice fields which develop anaerobic (low oxygen content) soil conditions following planting may reduce plant stand and yield. Anaerobic soil conditions are likely to occur when: (1) green matter and crop residue is plowed or worked into the soil prior to planting, (2) internal soil drainage is slow (poor percolation), (3) there is a continuous flood, and (4) there are areas in the field which retain water during periods of prescribed flood removal.

Delayed Phytotoxic Syndrome (DPS), which occurs under low oxygen soil conditions, is associated with the following symptoms in rice plants:

1. Dark green foliage and/or
2. Reduced plant height and/or
3. Plant deformation

Be prepared to drain the treated field(s) to allow for soil oxygenation at the first symptoms of DPS.

Management practices which will help to minimize the development of anaerobic soil conditions and thereby promote good soil conditions for the production of healthy rice treated with *Bolero 8 EC* Herbicide are:

- Destruction of previous crop and weed residues by:
  - burning (where state regulation allows) or straw removal
  - fall and winter plowing
  - use of chemical “burndown” (products containing paraquat or glyphosate) to prevent vegetation buildup after initial ground preparation (fall and winter plowing) and prior to final seedbed preparation.
- Application of fertilizer based on soil test results. **DO NOT** apply excess phosphorous.
- Uniform leveling practices which eliminate low spots in the field and ensure that the field can be entirely drained, if necessary. (This is far more difficult to achieve with the use of the contour levees. Fields which have been precision leveled for perimeter ditches or straight levees are more suited to rapid removal of flood water.)
- Uniform flood depth of 3 to 4 inches.
- Not exceeding labeled rates of *Bolero 8 EC* Herbicide, accurate calibration of application equipment and eliminating application overlap.
- If *Bolero 8 EC* Herbicide is used in water-seeded rice, **DO NOT** plant ADAIR, MILLIE or I-201 rice varieties.

### Precaution

Water-seeded rice fields treated with *Bolero 8 EC* Herbicide must be inspected regularly through the stand establishment and tillering stages. If phytotoxic symptoms, e.g., DPS, occur (see above), immediately drain the field (if recirculating systems or water impoundment allows or the field is hydrologically isolated) for 7 to 14 days or until the soil starts to crack to allow the soil to oxygenate; then re-flood. Low spots which do not drain completely may continue to display phytotoxic symptoms. Use of *Bolero 8 EC* Herbicide on rice fields which cannot be drained as necessary due to California water holding restrictions, may result in phytotoxic symptoms and **is done at the sole risk of the user.**

**WATER MANAGEMENT:** After a *Bolero* 8 EC Herbicide application, flood treated fields as soon as possible, as a prolonged delay in flooding (greater than 5-7 days) will result in reduced efficacy. Maintain water level in checks at about 3 to 4 inches with no exposed soil. Allowing water to recede or a prolonged soil exposure will result in loss of weed control. Excessively deep water can result in plant injury or death.

**DO NOT** drain *Bolero* 8 EC Herbicide treated fields for a minimum of 19 days after application, except where the County Agricultural Commissioner may allow shorter water holding periods for hydrologically isolated fields or for fields associated with systems designed to isolate discharged water from natural bodies of water. Examples of such systems include tailwater recovery systems for single or multiple fields, and use of fallow land for ponding discharged water. Contact the County Agricultural Commissioner for further information on acceptable water management practices.

### **STORAGE AND DISPOSAL**

**DO NOT** contaminate water, food or feed by storage and disposal.

#### **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 **800-892-0099**.

#### **PESTICIDE DISPOSAL**

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

#### **CONTAINER HANDLING**

##### ***Container Disposal language for container sizes less than 5 gal***

[Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.]

##### ***Container Disposal language for container greater than 5 gal or 50 lb***

[Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available or puncture and dispose of in a sanitary landfill.]

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