

PROPANIL GROUP 7 HERBICIDE

# Bengal

For Postemergence Control of Grass and Broadleaf Weeds in Rice Fields

**ACTIVE INGREDIENT:**

Propanil: 3',4'-Dichloropropionanilide\* ..... 41.2%

**OTHER INGREDIENTS:** ..... 58.8%

**TOTAL:** ..... 100.0%

\*Contains 4 lbs. of propanil per gallon of formulated product.

## KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you **DO NOT** understand this label, find someone to explain it to you in detail.)

FIRST AID	
<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>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.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<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. <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>
HOTLINE NUMBERS	
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at <b>1-800-222-1222</b>. For non-emergency information on this product, call 1-(910) 859-3090 Monday through Friday, 9AM to 4 PM EST, or contact the National Pesticides Information Center (NPIC) at <b>1-800-858-7378</b>. Monday through Friday, 8 AM to 12 PM PST. or at <a href="http://npic.orst.edu">http://npic.orst.edu</a>.</p>	

See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.

Manufactured For:

**Sharda USA LLC** 

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Hockessin, Delaware 19707

EPA Reg. No. 83529-255

EPA Est. No. **CS** 70815-GA-001; **MA** 83411-MN-001;

**MC** 89332-GA-001; **SC** 39578-TX-001; **TX** 07401-TX-001

The EPA Establishment Number is identified by the circled letters above that match the first two letters in the batch number.

# PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### CAUTION

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Mixers, loaders, ground applicators, and other handlers cleaning up spills or equipment or otherwise exposed to the concentrate and handlers removing an unrinsed probe must wear the following:**

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves made of Barrier Laminate, Butyl Rubber  $\geq$  14 mils, Nitrile Rubber  $\geq$  14 mils, Neoprene Rubber  $\geq$  14 mils, Natural Rubber  $\geq$  14 mils, Polyvinyl Chloride (PVC)  $\geq$  14 mils, or Viton  $\geq$  14 mils.\*,
- Chemical-resistant footwear plus socks,
- Protective eyewear (goggles, face shield, or safety glasses),
- Chemical-resistant apron when mixing and loading.

#### **Pilots and handlers removing a triple-rinsed probe must wear:**

- Long-sleeved shirt,
- Long pants, and
- Shoes plus socks.

See **ENGINEERING CONTROLS** for additional requirements.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR ALL TRANSFER SYSTEMS

Regardless of the type of system used, mixers and loaders must:

- Wear the personal protective equipment required in the PPE section of this labeling for mixers and loaders,
- Wear protective eyewear, if the system operates under pressure, and
- When using a system that meets the requirements in the WPS as a closed system or using a probe system when the probe is not removed, chemical-resistant footwear must be provided, be immediately available, and be used in an emergency, such as a broken package, spill, or equipment breakdown.

All systems must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. At any disconnect point, the system must be equipped with a dry disconnect or dry couple shut-off device that is warranted by the manufacturer to minimize drippage.

Flaggers: Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

Enclosed Cabs for Aerial Applicators: Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

#### USER SAFETY RECOMMENDATIONS

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. If pesticide gets on skin, wash immediately with soap and water.

#### USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them.

#### ENGINEERING CONTROLS

##### **Mixers and loaders must either:**

- Use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for dermal protection of agricultural pesticides [40 CFR 170.240(d)(4)]; or
- Use the probe system described below:

##### **Probe System**

Specific requirements for use of the probe closed mixing/loading system:

- Remove plug from bung of drum containing this product only when drum is sitting on the ground or on a secure level platform with the bung end of the drum pointed up.
- **DO NOT** pour this product from its drum.
- Transfer product from the drum to the mixing tank by use of a suction hose connected at one end to the suction pump on the mixing tank and connected at the other end to a probe (dip tube) that is inserted through the bung opening into the drum.
- **DO NOT** handle the probe or bung in a manner that will allow dripping or splattering of the product onto yourself or any other person.
- **DO NOT** touch the portion of the probe that has been in contact with this product until after the probe has been triple rinsed with water.
- If all of the product is removed from the drum, then triple rinse the probe while it remains inside the drum.

## Unrinsed Probes

If an unrinsed probe must be removed from the drum, then use an anti-drip flange and immediately transfer the probe into a container of rinse water. The anti-drip flange must be designed to remove excess propanil product from the probe as it is extracted from the drum.

Take the following steps if the probe must be disconnected from the suction hose before both the probe and the hose have been triple rinsed:

- Equip the probe end of the hose with a shut off valve.
- Install a dry break coupling between the valve and the probe.
- Close the shut off valve before disconnecting the probe.

## ENVIRONMENTAL HAZARDS

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 or rinsate. This product is toxic to fish and aquatic invertebrates. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. **DO NOT** contaminate water intended for irrigation or domestic purposes. **DO NOT** apply when weather conditions favor drift from areas to be treated.

This pesticide is toxic to birds.

## Groundwater Advisory

Propanil and 3,4-DCA (a major propanil degradant) are known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

## Non-Target Organism Advisory

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.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying. **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 24 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,
- Chemical-resistant gloves made of barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, polyvinyl chloride (PVC)  $\geq$  14 mils, or Viton<sup>®</sup>  $\geq$  14 mils,
- Chemical-resistant footwear plus socks, and
- Protective eyewear.

## PRODUCT INFORMATION

Several important factors should be taken into account to achieve a high efficiency of selective weed control with **Bengal**. These include uniform application, growth stage and weather conditions. To assure uniform application, mix the prescribed amount of **Bengal** with a sufficient volume of water to provide thorough coverage of target area. For aerial applications use approximately 10 gallons of water or for surface (ground) applications 20 - 30 gallons of water per acre at sufficient spray pressure. Agitate tank mixes thoroughly and continuously. Avoid over and under application. Growth stage of weeds is very important. Best results for selective weed control are obtained when most grasses have reached to 1 to 3 leaf stage.

Proper field preparation is essential to ascertain a relatively clod free and level surface and to obtain uniform flood levels and growth. Fields may be flushed prior to treatment to produce uniform and vigorous grass germination and growth. Drain water from fields prior to applying **Bengal**. Higher rates are recommended to control larger grasses or exposed weeds when rice fields are not completely drained. Inspect rice fields regularly to select the correct application time.

## Weather Conditions

**Temperature:** Temperatures at and before application affect product activity in controlling target weeds. Applications should be made when daily maximum temperatures are between 75 °F and 100 °F. Control decreases with temperatures below 75 °F and increases with temperatures above 75 °F.

**Application Timing:** **Bengal** normally requires 8 hours of DIRECT sunlight after application for absorption into target weeds; however, many atmospheric and environmental conditions can affect absorption into the target weeds. It is highly recommended that application of **Bengal** be planned so that the applied product remains in contact with the leaf surfaces for at least 48 hours prior to rainfall or flooding. Historically, morning applications of Propanil products, including **Bengal** have produced better results in weed control.

**Relative Humidity:** **Bengal** is a contact herbicide; therefore, herbicidal activity is affected by humidity. High humidity and dew aid in weed control by allowing the product to remain in solution longer on the leaf surface. Low humidity decreases plant activity and thus reduces product absorption. During periods of low humidity, higher spray volumes, 12 - 15 gallons per acre should be used when applied aerially.

**Soil Moisture:** Under dry conditions grass and broadleaf weeds are less susceptible to control. Higher rates of product, 4 - 6 quarts per acre should be used to achieve control.

**Wind:** Although **Bengal** is less susceptible to drift than solvent based Propanil products, application should be avoided if wind velocity is high enough to cause drift of the application spray off the target site or irregular spray patterns.

#### WEEDS CONTROLLED\*

**Bengal** is used for postemergence control of broadleaf and grass weeds in rice fields.

Common Name	Scientific Name	Common Name	Scientific Name
Barnyardgrass	<i>Echinochloa crus-galli</i>	Millet (Texas)	<i>Urochloa texana</i>
Bracharia	<i>Bracharia platyphylla</i>	Morning-glory	<i>Ipomoea</i> spp.
Coffeeweed	<i>Sesbania herbacea</i>	Paragrass	<i>Urochloa mutica</i>
Crabgrass	<i>Digitaria</i> spp.	Pigweed	<i>Amaranthus</i> spp.
Croton	<i>Croton</i> spp.	Redstem	<i>Ammannia coccinea</i>
Curly indigo	<i>Aeschynomene virginica</i>	Rice field bulrush	<i>Scirpus mucronatus</i>
Eclipta	<i>Eclipta prostrata</i>	Smallflower umbrella Plant	<i>Cyperus difformis</i>
Foxtail Species	<i>Setaria</i> spp.	Smartweed	<i>Polygonum</i> spp
Goosegrass	<i>Eleusine indica</i>	Sicklepod	<i>Cassia obtusifolius</i>
Ground cherry	<i>Physalis</i> spp.	Sourdock	<i>Rumex crispus</i>
Gulf Cockspur	<i>Echinochloa crus-pavonis</i>	Spearhead	<i>Phacelia hastata</i>
Mexicanweed	<i>Caperonia castaneifolia</i>	Wiregrass	<i>Eleusine indica</i>
* <b>Bengal</b> will not control arrowhead, Bermudagrass, cattail, ducksalad, Johnsongrass, nutgrass, red rice and sprangletop.			

#### USE RESTRICTIONS

- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** plant or transplant crops in the treated area for at least 60 days following an application of this product.
- **DO NOT** apply more than 1.5 gallons of **Bengal** (6.0 lbs. active ingredient) per acre per application.
- **DO NOT** apply more than 2.0 gallons of **Bengal** (8.0 lbs. active ingredient) per acre per year.
- **DO NOT** make more than 2 applications per year.
- Applications to fields where commercial catfish farming is practiced and draining water from treated fields into areas where catfish farming is practiced is prohibited during 12 months following treatment.
- **DO NOT** fish or commercially grow fish, shellfish or crustaceans on treated areas during the 12 months following treatment.
- **DO NOT** apply when temperature exceeds 90 °F.
- **DO NOT** retreat with propanil within 7 days of last application to rice.
- **Pre-harvest Interval: DO NOT** apply within 60 days of harvest.
- **DO NOT** apply this product (directly or indirectly) to any crop except rice.
- **DO NOT** apply when wind conditions will allow drift to adjacent, susceptible crops such as beans, soybeans, cotton, safflower, cucurbits, vegetables, orchards (such as almonds, prunes and grapes) and other sensitive crops.
- Water drained from treated rice fields must not be used to irrigate other crops or be released within 1/2 mile of a potable water intake in flowing water (i.e., river, stream, within 1/2 mile of a potable water intake in a standing body of water such as a lake, pond, or reservoir.)

#### EMERGENCY RELEASE PROVISION

Water holding (discharge) intervals for flood water from treated rice paddies following treatment in all states:

- **For Delayed Flood (Water-Seeded) Rice Grown South of Interstate Highway 10 from the Texas/Louisiana border to Houston and east of State Highway 35 from Houston to Port Lavaca** – Flood water must be held for 10 days after treatment unless excessive rainfall completely submerges the rice crop and forces premature release. For Texas rice grown in areas north or west of these boundaries, the water holding interval is 7 days.
- **For Delayed Flood (Water-Seeded) Rice in Southern Louisiana South of Highway 14** – Flood water must be held for 15 days after propanil treatment unless excessive rainfall completely submerges the rice crop and forces premature release. For delayed flood (water-seeded) rice in Louisiana, north of the Highway 14 boundary, the water holding interval is 7 days.
- **For Rice Grown in California and All Other Parts of the United States Not Mentioned Above** – Flood water must be held for 7 days after application unless excessive rainfall completely submerges the rice crop and forces premature release.

## RESISTANCE MANAGEMENT

### PROPANIL GROUP 7 HERBICIDE

**Bengal** contains propanil and is classified as a Group 7 herbicide. Any weed population may contain or develop plants naturally resistant to **Bengal** and other Group 7 herbicides. The resistant biotypes may dominate the weed population if this group of herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies must be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of **Bengal** or other Group 7 herbicides within a growing season, or among growing seasons, with different groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group that are equally effective on the target weeds when such use is permitted; where information on resistance in target weeds 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.
- 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.
- 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.
- Suspected herbicide-resistant weeds may be identified by these indicators:
  - Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
  - A spreading patch of non-controlled plants of a particular weed species; and
  - Surviving plants mixed with controlled individuals of the same species.
- 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 any additional pesticide resistance-management and/or integrated weed-management recommendations for the specific crops and weed biotypes.

Report any incidence of non-performance of this product against a particular weed species to your local Sharda USA LLC representative. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.

### MANDATORY SPRAY DRIFT MANAGEMENT

#### Aerial Applications:

- **DO NOT** release spray at 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 select the nozzle and pressure that deliver medium or coarser droplets as indicated in manufactures' catalogues and in accordance with American Society of Agriculture & Biological Engineers Standard S641 (ASABE 641).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wing-span for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, 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.
- If the windspeed is 10 miles per hour or less, applicators must use 1/2 swath displacement upwind at the downwind edge of the field. When the windspeed is between 11 - 15 miles per hour, applicators must use 3/4 swath displacement upwind at the downwind edge of the field.
- **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 select the nozzle and pressure that deliver medium or coarser droplets as indicated in manufactures' catalogues and in accordance with American Society of Agriculture & Biological Engineers Standard 572 (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 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 lower spray pressures recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzles** - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest 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.

### APPLICATION INFORMATION

Apply 3 quarts of **Bengal** per acre when most grasses have reached the 1 to 3-leaf stage. Use 4 to 6 quarts of **Bengal** per acre when the grasses are large (4 to 6-leaf stage) or when unseasonably cool weather conditions prevail, grass and broadleaf weeds are stressed due to dry conditions or in cases where the rice fields have not been drained completely and where weeds are large enough.

Barnyardgrass may be controlled up to 30 to 45 days after planting, before rice plants have reached the fully tillered growth stage.

**Note:** **Bengal** applied to rice after the 4-leaf stage may cause visible injury under some climatic conditions. Rice plants usually outgrow such injury.

### IN CALIFORNIA

Use **Bengal** only where rice fields are completely drained or a minimal amount of water remains. If higher water level is desired, reflood field after 12 hours and before 7 days after treatment. This will discourage new weed infestations. **DO NOT** apply **Bengal** within 14 days before or after insecticide applications. Serious injury to rice may occur.

### SPRAY MIXTURE PREPARATION

#### Wet Spray Application

Thoroughly mix **Bengal** with clean water (water that is free of sediment and agricultural chemicals) in the spray tank. **DO NOT** use water from paddies. Only approved drift control agents may be used with **Bengal**. **DO NOT** use any other additives except as directed by this label.

To ensure uniform mixing and application, agitate the mixture before application. If the mixture is not sprayed immediately after agitation, reagitrate it before application. Always apply **Bengal** spray preparations within 24 hours of product mixing, or the product may degrade.

**DO NOT** store **Bengal** in nurse tanks or any other tanks used to store or transport clean water. Install one-way valves (anti-siphoning devices) on lines and hoses of mixing/loading equipment to prevent contamination of nurse tanks or other clean water sources.

Mixing and application equipment exposed to **Bengal** cannot be used for anything other than rice applications until it has been cleaned according to the procedures in the **SPRAYER CLEANUP** section of this label.

#### Additional Mixing Instructions (wet spray)

1. Fill the tank 1/4 to 1/3 full of clean water.
2. While agitating, add the required amount of **Bengal**.
3. Continue agitation until the **Bengal** is fully dispersed, at least 5 minutes.
4. Once the **Bengal** is fully dispersed, maintain agitation and continue filling the tank with water. **Bengal** should be thoroughly mixed with water before adding any other material.
5. As the tank is filling, add the required tank mix partner (other labeled rice herbicides, adjuvants, drift control agents, etc.).
6. If the mixture is not continuously agitated, settling may occur. If settling occurs, thoroughly re-agitate before using.
7. Apply **Bengal** spray preparations within 24 hours of product mixing, or the product may degrade.
8. If **Bengal** and a tank mix partner are to be applied in multiple loads, pre-slurry the **Bengal** in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the **Bengal**.

## TANK MIXTURES

**Bengal** can be tank mixed with any herbicide(s) registered for use on rice to increase the weed control spectrum. 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..

### **Bengal plus Quinclorac - Early Postemergence**

For a broader spectrum of postemergence grass and broadleaf weed control in rice, tank mix **Bengal** with products containing Quinclorac.

When the **Bengal** plus Quinclorac tank mix is to be applied to rice fields during the early stage of rice growth (shortly after the first true leaf on the rice has developed), where longer Quinclorac residual activity is needed, and grass weeds are in the 1 - 4 leaf stage, apply 3 - 4 quarts of **Bengal** tank mixed with 0.375 pounds of Quinclorac active ingredient per acre.

When the **Bengal** plus Quinclorac tank mix is to be applied to larger rice than can soon tolerate a permanent flood (long quinclorac residual control not needed) yet prior to 80 days before harvest, apply as conditions warrant the following rates:

Grass Stage <sup>1</sup> Rate	Bengal Rate	Quinclorac Rate
1 - 3 leaf stage	2.5 quarts	0.250 pounds
4 - 5 leaf stage	4.0 quarts	0.250 pounds
larger tillering	4 - 5 quarts	0.375 pounds

<sup>1</sup>This tank mix combination works best when the grass weeds are in the 2 - 3-leaf stage and are actively growing. Use on larger tillering grasses is a rescue treatment and less likely to achieve total control.

When tank mixing **Bengal** and Quinclorac, 2 pints of crop oil concentrate should be added. Follow all **Bengal** and Quinclorac restrictions and water management instructions.

## SPRAYER CLEAN-UP

Prior to using equipment exposed to this product to treat another crop, clean the sprayer and any other equipment (loading hoses, batch tanks, etc.) using the following procedure:

1. Steam-clean tank using a non-chlorine-based detergent, taking care to remove all physical residues.
2. Thoroughly rinse sprayer, tanks, boom, and hoses with clean water (free of sediment and agricultural chemicals).
3. Fill the tank 1/2 full with clean water and add Nutrasol at 32 oz. per 100 gals. water. Fill the tank to capacity with clean water. Flush the nozzles, boom, and hoses, and agitate (and recirculate, if possible) the sprayer for 15 minutes. Drain the equipment, taking care to flush the boom and hoses thoroughly.
4. Rinse tanks, hoses, and nozzles with clean water to remove Nutrasol.
5. Fill the tank 1/2 full with clean water and add 1 gal. 21% ammonia or 7 gals. 3% ammonia per 100 gals. water. Fill the tank to capacity with clean water. Flush the nozzles, boom, and hoses and agitate (and recirculate, if possible) the sprayer for 15 minutes. Drain the equipment, taking care to flush the boom and hoses thoroughly.
6. Remove nozzles, screens, and strainers, and clean them separately.
7. Rinse tanks, booms, and hoses with clean water.
8. Repeat steps 5 and 7 an additional 3 times.
9. Rinse tanks, booms, and hoses to remove all traces of ammonia.
10. Water rinses may be applied to rice fields. Dispose of bleach rinses at an approved waste disposal facility.

**Note:** When applying multiple loads of **Bengal** several days in a row, the following procedure must be performed at the end of each day: partially fill the tank with fresh water, flush the boom and hoses, and allow to set overnight.

Perform cleanup procedures on batch tanks and any other mixing equipment separately from aircraft hoppers. Take care to clean loading hoses and any other equipment or surfaces exposed to **Bengal**.

**DO NOT** use chlorine bleach with ammonia. All traces of liquid fertilizer containing ammonia, ammonium nitrate or ammonium sulphate must be rinsed from the mixing and application equipment using water prior to adding chlorine bleach solution. Failure to do so will release a gas with a musty chlorine odor that can cause eye, nose, and throat and lung irritation.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store this product in a cool, dry place in its original container only. **DO NOT** store this product near fertilizers, seeds, or other pesticides. Store at temperatures above 32 °F. If product is allowed to freeze, warm to 50 °F and agitate before using. If this product is spilled, sweep up the spillage and dispose pursuant to the below PESTICIDE DISPOSAL instructions.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### CONTAINER HANDLING:

**Less Than or Equal to 5 Gallons:** Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

**Greater Than 5 Gallons:** Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**For Bulk and Mini-Bulk Containers:** Refillable container. Refill this container with pesticide only. **DO NOT** use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by State and local authorities.

**CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!**

### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire **Directions for Use** and **Conditions of Sale and Limitation of Warranty and Liability** before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The **Directions for Use** of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Sharda USA LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Sharda USA LLC and Seller harmless for any claims relating to such factors.

Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the **Directions for Use**, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or Sharda USA LLC and, to the extent consistent with applicable law, Buyer and User assume the risk of any such use. To the extent consistent with applicable law, SHARDA USA LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Sharda USA LLC nor Seller shall be liable for any incidental, consequential, or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SHARDA USA LLC AND 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 THE PRODUCT OR, AT THE ELECTION OF SHARDA USA LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Sharda USA LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Sharda USA LLC.

All trademarks are the property of their respective owners.



# Bengal

For Postemergence Control of Grass and Broadleaf Weeds in Rice Fields

<b>ACTIVE INGREDIENT:</b>	<b>WT. BY %</b>
Propanil; 3',4'-Dichloropropionanilide*	41.2%
<b>OTHER INGREDIENTS:</b>	58.8%
<b>TOTAL:</b>	<b>100.0%</b>

\*Contains 4 lbs. of propanil per gallon of formulated product.

## KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you **DO NOT** understand this label, find someone to explain it to you in detail.)

**FIRST AID - IF ON SKIN OR CLOTHING:** • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice. **IF IN EYES:** • Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for further treatment advice. **IF SWALLOWED:** • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • **DO NOT** induce vomiting unless told to by a poison control center or doctor. **DO NOT** give anything by mouth to an unconscious person. **IF INHALED:** • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice. **HOTLINE NUMBERS** - Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at **1-800-222-1222**. For non-emergency information on this product, call 1-(910) 859-3090 Monday through Friday, 9AM to 4 PM EST, or contact the National Pesticides Information Center (NPIC) at **1-800-858-7378**. Monday through Friday, 8 AM to 12 PM PST, or at <http://npic.orst.edu>.

See inside for complete Precautionary Statements,  
Directions For Use, and Storage and Disposal.

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

Manufactured For: Sharda USA LLC, 7217 Lancaster Pike, Suite A, Hockessin, Delaware 19707

EPA Reg. No. 83529-255

EPA Est. No. **CS** 70815-GA-001; **MA** 83411-MN-001; **MC** 89332-GA-001; **SC** 39578-TX-001; **TX** 07401-TX-001

The EPA Establishment Number is identified by the circled letters above that match the first two letters in the batch number.

### ENVIRONMENTAL HAZARDS

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 or rinsate. This product is toxic to fish and aquatic invertebrates. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. **DO NOT** contaminate water intended for irrigation or domestic purposes. **DO NOT** apply when weather conditions favor drift from areas to be treated. This pesticide is toxic to birds.

### Groundwater Advisory

Propanil and 3,4-DCA (a major propanil degradant) are known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

### Non-Target Organism Advisory

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.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying. **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.

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Net Contents: 30 Gals.\* ☐ 265 Gals.

\* Unless alternate checked