

71085-2

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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

JUL 10 2002

Sam Bondurant  
Director, Regulatory Affairs  
RICECO LLC  
5100 Poplar Avenue, Suite 2428  
Memphis, Tennessee 38137 USA

Subject: Propanil 4 Herbicide  
Alternate Brand Name: Blue Drum Herbicide  
EPA Reg. No. 71085-2  
Re: Label Amendments  
Your submission dated April 9, 2002

Dear Mr. Bondurant:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable, provided you make the following changes to the submitted PROPANIL 4 label:

The Registrant **must**:

1. Make the front label ingredient statement more prominent and clearly distinguished from other text on the panel. Use uppercase letters, enlarge, or bold the front label headings: "Active Ingredient" and "Inert Ingredient."
2. Under the subheadings **Applicators and other handlers must wear:** within the Precautionary Statements box and **PPE required for early entry . . .** within the Agricultural Use Requirements box:
  - Add "(≥ 14 mils)" to the end of the statement concerning gloves so that the statement reads "Chemical-resistant gloves, such as barrier laminate or butyl rubber."
  - Replace the statement "Shoes socks" with "Shoes plus socks."
3. Insert the following label language advisory statements or paragraphs under the ENVIRONMENTAL HAZARDS section of the label:

- Add "This pesticide is toxic to shrimp." to the beginning of the paragraph so that it precedes the first sentence "For terrestrial uses, do not apply . . . below the high water mark."
  - Add as a second paragraph to ENVIRONMENTAL HAZARDS: "This product may contaminate water through runoff following rainfall events and by seepage through levees. This product has a high potential for runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Levees should be constructed with adequate time prior to chemical application so that they are compacted to reduce seepage and to hold a 3-6 inch flood (2001 Mississippi Rice Growers Guide). Other guidance is located at <http://agronomy.ucdavis.edu/uccerice/water/seep.htm> and from the document "Closed Rice Water Management Systems" from the National Resource Conservation Service of USDA. The University of Arkansas Rice Production Book ([http://www.uaex.edu/other\\_areas/publications/html](http://www.uaex.edu/other_areas/publications/html)) also provides information concerning levee production."
  - Add as a third statement to ENVIRONMENTAL HAZARDS: "Do not allow this product to drift."
4. Add the word "PESTICIDE" to the Storage and Disposal section of the label so that the first paragraph begins with: "PESTICIDE STORAGE."
  5. Replace the following statement under the subheading PESTICIDAL DISPOSAL: "If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency or the hazardous waste representative at the nearest EPA regional office for guidance." with "If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance."
  6. Move the statement "Keep containers closed when not in use" that appears on page 6 of the label to the Storage and Disposal box, second paragraph under the corrected (See number 4) subheading PESTICIDE STORAGE.
  7. Delete the subheading statement "Number of Nozzles" within the Spray Drift Management section of the label and replace with "Nozzle Orientation."
  8. Replace the following statement that appears in the text for SPRAY DRIFT MANAGEMENT under the subheading Swath Adjustment: "When applications are made with a crosswind, the swath will be displaced downward." with "When applications are made with a crosswind, the swath will be displaced downwind."
  9. Identify the water rinses that may be applied to rice fields by placing this information either within statement number 10 that appears under subheading SPRAYER CLEANUP

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on page 7 of the label or at each appropriate sequential sprayer cleanup step.

10. Correct the typographical and grammatical errors that appear under the subheading ATTENTION on page 7 of the label. Replace the statement "Failure to do so will release a gas with a musty chlorine odor that can cause eye, nose, and throat and lung irritation." with "Failure to do so will release a gas with a musty chlorine odor that can cause eye, nose, throat and lung irritation."

The Agency **recommends** the following changes to the PROPANIL 4 label:

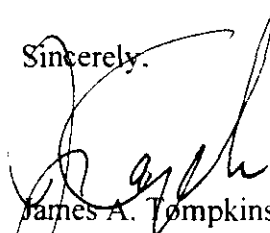
1. Add the common name "Propanil" under the front label heading "Active Ingredients" and place the full chemical name within parentheses, (3', 4'-dichloropropionanilide), directly next to the common name.
2. Move the "EPA Reg. No. 71085-2" and the "EPA Establishment No." to a position below the First Aid table, beginning at the left margin and just above Net Contents.
3. Add the following statement within the Spray Drift Management section of the label after the "Nozzle Orientation" statement: "Number of Nozzles-Use the minimum number of nozzles that provide uniform coverage."
4. Provide an extension service contact/telephone number for the statement that appears on page 6 of the label "Consult Extension Services for detailed application advise."

Your request for a separate label using the alternate product name "BLUEDRUM" for the purpose of state registrations is accepted provided you make the required changes listed in this correspondence for the "PROPANIL 4" label.

Please submit two (2) copies of your final printed labels incorporating these changes before releasing your product for shipment. A stamped copy is enclosed for your records.

If you have any questions or concerns, please contact me at (703) 305-5697 or the product team reviewer Michelle Centra at (703) 308-2476.

Sincerely,



James A. Tompkins  
Product Manager Team (25)  
Herbicide Branch  
Registration Division (7505C)



# BLUE DRUM®

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:  
JUL 10 2002

## Herbicide

For postemergent control of broadleaf and grass weeds in Rice fields.

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. <u>71085-2</u>	Active Ingredient:	3',4'-dichloropropionanilide	43.50%
	Inert Ingredients:		56.50%
	TOTAL		100.00%

This product contains 4 lbs. of 3',4'-dichloropropionanilide per gallon.

EPA registration No. 71085-2  
EPA Establishment No.

This product contains the toxic  
inert isopherone.

## 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 the label, find someone to explain it to you in detail.)

FIRST AID	
If inhaled	<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 by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice</li></ul>
If on skin or clothing	<ul style="list-style-type: none"><li>• Take off contaminated clothing. Do not reuse contaminated clothing until laundered.</li><li>• Wash skin immediately with plenty of water for 15-20 minutes</li><li>• Call a poison control center or doctor for treatment advice if irritation continues</li></ul>
If in eyes	<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 treatment advice</li></ul>
If swallowed	<ul style="list-style-type: none"><li>• Immediately call a poison control center or doctor</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor</li><li>• Do not give any liquid to the person</li><li>• Do not give anything by mouth to an unconscious person</li></ul>
FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-M-E-D (327-8633) FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300 Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
NOTE TO PHYSICIAN Contains petroleum distillates. May cause chemical pneumonitis if aspirated. If lavage is performed, suggest endotracheal and/or esophagoscopy control.	

NET CONTENTS: 20 LTS. / 200 LTRS. / 30 U.S. GALS.

**AGRICULTURAL CHEMICAL**  
**DO NOT SHIP OR STORE WITH FOOD, FEEDS, DRUGS OR CLOTHING.**

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

Harmful if swallowed. Avoid breathing spray mist. May cause skin irritation. Avoid contact with skin, eyes, or clothing. In case of contact, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

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

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or butyl rubber
- Shoes socks
- Chemical-resistant headgear for overhead exposure

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**ENGINEERING CONTROL STATEMENTS:** *When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.*

**USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 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**

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. This product is toxic to fish. 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 target area.

**PHYSICAL AND CHEMICAL HAZARDS**

Do not use or 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. 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 24 hours.

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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, such as barrier laminate or butyl rubber
- Shoes socks
- Chemical-resistant headgear for overhead exposure

### STORAGE AND DISPOSAL

**STORAGE:** Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not store this product near fertilizers, seeds, insecticides, or fungicides. Do not store near heat or open flame. Containers should not be stacked more than 4 containers high. Reclose all partially used containers by thoroughly tightening bungs. Damaged or leaking containers, which contain product that cannot be used immediately, should be transferred to suitable sound containers and properly marked. Absorb any spill with a suitable absorbent and dispose of as indicated under "Pesticide Disposal".

For safety and prevention of unauthorized use, all pesticides should be stored in locked facilities. To prevent accidental misuse, different pesticides should be stored in separate areas with enough distance between to provide clear identification. Opened, partially used pesticides should be stored in original containers when possible. When transfer to another container is necessary because of leakage or damage, carefully mark and identify contents of the new container.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency or the hazardous waste representative at the nearest EPA regional office for guidance.

#### CONTAINER DISPOSAL:

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

**PLASTIC Containers:** Triple rinse (or equivalent), adding rinsate to spray tank. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**DO NOT** apply this product through any type of irrigation system.

**DO NOT** apply to fields where commercial catfish farming is practiced and do not drain water from treated fields into areas where catfish farming is practiced.

### WHERE TO USE

RiceCo BLUE DRUM® is used for postemergent control of broadleaf and grass weeds in RICE fields.

### WEEDS CONTROLLED

Barnyard (watergrass), brachiaria, coffeeweed, crabgrass, croton, curly indigo, foxtail, goosegrass, gulf cockspur, mexicanweed, millet (Texas), paragrass, pigweed, sourdock, spearhead, wiregrass.

(This product will not control arrowhead, bermudagrass, cattail, ducksalad, johnsongrass, nutgrass, red rice and sprangletop).

### GENERAL INFORMATION

Several important factors should be taken into account to achieve a high efficiency of selective weed control with BLUE DRUM. These include uniform application, growth stage and weather conditions. To assure uniform application, shake or roll container prior to opening and mix the prescribed amount of product with a sufficient volume of carrier to provide thorough coverage of target area. For aerial application use approximately 10 gallons, and for surface (ground) applications 20-30 gallons of carrier per acre at high enough pressure. Agitate tank mixes thoroughly and continuously. Avoid over and under application.

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Growth stage of weeds is very important. Best results for selective weed control are obtained when most grasses have reached the 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 product. 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 must be observed closely. Under cool weather conditions higher rates are required to achieve satisfactory control. Avoid application if rain threatens within 6 to 8 hours, or if wind velocities are high enough to cause drift and irregular spray patterns.

#### **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 decreased with temperatures below 75°F and increases with temperatures above 75°F.

**Application Timing:** BLUE DRUM 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 BLUE DRUM be planned so that the applied product remain in contact with the leaf surfaces for at least 48 hours prior to rainfall or flooding. Historically, morning applications of Propanil products, including BLUE DRUM, have produced better results in weed control.

**Relative Humidity:** BLUE DRUM 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 very low humidity, higher spray volumes, 8-10 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, up to 6 quarts per acre, should be used to achieve control.

**Wind:** Avoid application if wind velocity is high enough to cause drift of the application spray off the target site or irregular spray patterns.

#### **SPRAY DRIFT MANAGEMENT**

Avoiding spray drift at the application is the responsibility of the applicator. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering these factors when making application decisions.

The distance from the outer most nozzles to the boom must not exceed  $\frac{1}{4}$  the length of the wingspan or rotor.

Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

#### **Information on Droplet Size**

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control.

Application of BLUE DRUM must conform to the conditions set forth in the current CA propanil regulations (3CCR 6462). Aerial Applications: Each operating nozzle shall produce a droplet size, in accordance with the manufacturer's specifications, not less than 600 microns volume median diameter (Dv0.5) with 10 percent of the diameter by volume (Dv0.1) not less than 200 microns. Ground Applications: Each operating nozzle shall produce

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a droplet size, in accordance with manufacturer's specifications, not less than 500 microns volume median diameter (Dv0.5) with 10 percent of the diameter by volume (Dv0.1) not less than 200 microns.

The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions.)

### Controlling Droplet Size

**Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

**Pressure** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles of increasing pressure.

**Number of Nozzles** – Orienting nozzles so that the spray is released parallel to the air stream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

### Boom Length

For some use patterns, reducing the effective boom length to less than  $\frac{1}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

### Application Height

Applications should be made at a height no greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

### Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.)

### Wind

Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

### Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

### Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small-suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by 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.

### Sensitive Areas

Do not apply when wind conditions will allow drift to sensitive areas. Sensitive areas include, but are not limited to, residential areas, bodies of water, known habitat for threatened or endangered species, and non-target crops.



**ADJUVANTS AND APPLICATION AIDS:**

When **BLUE DRUM** is used alone (not in combination with any other postemergent rice herbicide), a low viscosity crop oil concentrate or surfactant may be used to improve wetting of foliage and increase weed control. Use of a crop oil concentrate is recommended when application is made during cool weather conditions or unstable weather conditions that may produce rain. Under adverse weather conditions, the addition of a crop oil concentrate when tank mixing **BLUE DRUM** and other rice herbicides for application should be considered. Consult product labels for adjuvant recommendations. The use of a suitable crop oil concentrate or surfactant does not significantly increase injury to rice (leaf tip burn.)

Consult Extension Service for detailed application advise.

**RECOMMENDED BROADCAST RATE**

Apply 3 quarts of **BLUE DRUM**® per acre when most grasses have reached the 1 to 3-leaf stage. Use 4 to 6 quarts of product 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 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:** **BLUE DRUM** applied to the rice after the 4-leaf stage may cause visible injury under some climatic conditions. Rice plants usually outgrow such injury.

**NOTE:** Water drained from treated rice fields must not be used to irrigate other crops or be released within ½ mile of a potable water intake in flowing water (i.e., river, stream, etc.) or within ½ mile of a potable water intake in a standing body of water (i.e., lake, pond or reservoir).

**IN CALIFORNIA:** Use **BLUE DRUM** only where rice fields are completely drained or a minimal amount of water remains. If higher water level is desired, reflood after 12 hours and before 7 days after treatment. This will discourage new weed infestations.

**DO NOT** apply **BLUE DRUM** within 14 days before or after application of carbamates or organophosphate products. Serious injury to rice may occur.

**DO NOT** apply **BLUE DRUM** directly or indirectly to any crop except rice.

**DO NOT** apply **BLUE DRUM** when wind conditions will allow drift to adjacent, susceptible crops such as beans, soybeans, cotton, sunflower, cucurbits, vegetables, orchards and other sensitive crops.

Keep containers closed when not in use.

**SPRAY MIXTURE PREPARATION****Wet Spray Application**

Thoroughly mix **BLUE DRUM** 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, e.g. Chemtrol6, may be used with **BLUE DRUM**. 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, re-agitate it before application. Always apply **BLUE DRUM** spray preparation within 24 hours of product mixing, or the product may degrade.

Do not store **BLUE DRUM** in nurse tanks or any other tanks used to store or transport clean water. Install one-way valves (anti-siphoning devices) on liens and hoses of mixing/loading equipment to prevent contamination of nurse tanks or other clean water sources.

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Mixing and application equipment exposed to BLUE DRUM 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  $\frac{1}{4}$  to  $\frac{1}{3}$  full of clean water.
2. While agitating, add the required amount of BLUE DRUM.
3. Continue agitation until the product is fully dispersed, at least 5 minutes.
4. Once the BLUE DRUM is fully dispersed, maintain agitation and continue filling the tank with water. The product 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 BLUE DRUM spray preparations within 24 hours of product mixing, or the product may degrade.
8. If BLUE DRUM and a tank mix partner are to be applied in multiple loads, pre-slurry the product in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the BLUE DRUM.

#### SPRAYER CLEANUP

Before using equipment exposed to BLUE DRUM 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, making sure 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 one-half full with clean water and add ammonia or bleach or 100 gal. of water. Fill the tank to capacity with clean water, flush the nozzles, boom, and hoses and agitate (and recirculate if possible) the solution for 5 minutes.
4. Rinse tanks, booms, booms, and hoses with clean water.
5. Fill the tank one-half full with clean water and add ammonia or bleach or 100 gal. of water. Fill the tank to capacity with clean water, flush the nozzles, boom, and hoses and agitate (and recirculate if possible) the solution for 5 minutes.
6. Remove nozzle, screen, and wand, 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 BLUE DRUM 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 sit overnight.

**ATTENTION:** 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 before 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. Do not clean equipment in an enclosed area.

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 BLUE DRUM.

#### CONDITIONS OF SALE AND WARRANTY

RICECO AND SELLER OFFER THIS PRODUCT AND THE BUYER AND USER ACCEPTS THIS PRODUCT UNDER THE FOLLOWING AGREED CONDITIONS OF SALE AND WARRANTY.

The directions for use of this product are believed to be reliable and should be followed carefully. However, it is impossible to take into account all variables and to eliminate all risks associated with its use. Injury or damage may result because of conditions that are beyond the control of RiceCo or the Seller. RiceCo warrants only that this product conforms to the chemical description of the label and is believed to be reasonably fit

for the purposes referred to in the Directions for Use when used as directed under normal conditions. RICECO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. In no case shall RiceCo or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. Any variation from this warranty must be in writing and signed by an authorized RiceCo representative.



5100 POPLAR AVENUE, SUITE 2428  
MEMPHIS, TENNESSEE 38137 USA

BLUE DRUM® is the registered trademark of RICECO.

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