

71085-20

6-26-2008

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Judy Smith
Regulatory Consultant
RiceCo LLC
5100 Poplar Avenue, Suite 2428
Memphis, TN 38137

JUN 26 2008

Subject: Label Notification(s) for Pesticide Registration Notices 2007-4

Dear Ms. Smith:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notices (PRN) 2007-4 dated June 10, 2008 for:

EPA Registration 71085-20

Propanil EC

The Registration Division (RD) has conducted a review of this request for applicability under PR Notices 2007-4 and finds that the label changes requested falls within the scope of PR Notices 2007-4. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact me directly at 703-305-6249 or Nicole Williams of my staff at 703-308-8893.

Sincerely,

A handwritten signature in black ink, appearing to be "Linda Arrington".

Linda Arrington
Notifications & Minor Formulations Team Leader
Registration Division (7505P)
Office of Pesticide Programs

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VIA FEDERAL EXPRESS TRK # 7905 2345 5411

June 10, 2008

Jim Tompkins, PM 25
Herbicide Branch
Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
One Potomac Yard – Room S-4900
2777 South Crystal Drive
Arlington, VA 22202-4501

**RE: PROPANIL EC - EPA REG. NO. 71085-20
NOTIFICATION AMENDMENT**

Dear Mr. Tompkins:

Enclosed please find the following in support of our Notification Amendment for the above referenced product:

- 1 - 8570-1 Notification Amendment Form
- 2 - Labels

RiceCo LLC is adding the container language as required by PR-Notice 2007-4.

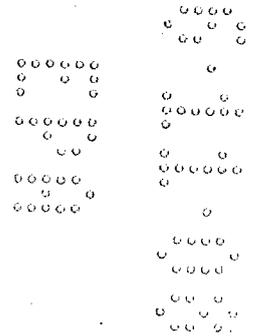
If you have questions/comments, please do not hesitate to contact me by telephone @ (901) 684-5390 or via email @ riceco.reg@ricecollc.com.

Sincerely,

RICECO LLC

Judy Smith
Regulatory Consultant

Encls.



"...from the paddy to the plate"

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PROPANIL EC

Herbicide

NOTIFICATION

JUN 26 2008

Active Ingredient:	
Propanil (3', 4'-dichloropropionanilide)	43.50%
Inert Ingredients:	<u>56.50%</u>
TOTAL	100.00%

Equivalent to 4 lbs. active ingredient per gallon.
This product contains the toxic inert ingredient isophorone.

EPA Registration No. 71085-20

EPA Establishment No. 34704-MS-01

KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se le explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
If Swallowed:	<ul style="list-style-type: none"> • 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 in eyes:	<ul style="list-style-type: none"> • 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. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • 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 inhaled:	<ul style="list-style-type: none"> • 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.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
In Case of Chemical Spill, Leak, Exposure Call Global Logistics @ (504) 439-3140 or (727) 374-5705	

MANUFACTURED FOR:
RiceCo LLC
Memphis, TN 38137

NET CONTENTS: 30 GAL

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

Harmful if swallowed. Causes moderate eye irritation. Causes skin irritation. Do not get in eyes, on skin, or clothing. Avoid contact with eyes, skin or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are chemical-resistant gloves, made of waterproof materials, such as butyl rubber nitrile rubber or neoprene rubber >14 mils. If you want more options, follow the instructions for category B on an EPA chemical resistance category selection chart.

(This section is for formulations NOT packaged with Built-in Probes)

Mixers, loaders, applicators, and other handlers must wear the following, except when removing an unrinsed probe:

- Long-sleeved shirt,
- Long pants,
- Shoes and socks,
- Chemical-resistant gloves and chemical resistant apron when mixing/loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- In addition handlers must wear chemical-resistant footwear when cleaning up spills or equipment.

Mixers, loaders, and other handlers must wear the following when removing an unrinsed probe:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant footwear plus socks,
- Protective eyewear, if the system operates under pressure, and
- Chemical-resistant apron.

See Engineering Controls for additional requirements.

(This section is for formulations packaged WITH built-in probes)

Some materials that are chemical-resistant to this product are barrier laminate or butyl rubber gloves ≥ 14 mils. For more information, follow instructions in Supplement Three of PR Notice 93-7. If you want more options, follow the instructions for category B on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators and other handlers must wear the following:

- Long-sleeved shirt,
- Long pants
- Shoes plus socks
- Chemical-resistant gloves and chemical-resistant apron when mixing/loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See Engineering Controls for additional requirements.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands 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.

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.

Note to EPA Reviewer: The following Engineering Controls will be used if product packaged with built in probe

ENGINEERING CONTROLS

Mixers and loaders must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 160.240(d)(4)] for dermal protection and 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
- Chemical-resistant footwear must be provided and be immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown.

Note to EPA Review: The following Engineering Controls will be used if product packaged without built in probe.

ENGINEERING CONTROLS

Mixers and loaders must either:

- (1) use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for dermal protection of agricultural pesticides [40 CFR 160.240(d)(4)],

OR

- (2) 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 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 allows 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 the product is removed from the drum, then triple rinse the probe while it remains inside the drum.

UN-RINSED PROBES

- ✓ If an un-rinsed 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:
 - (1) Equip the probe end of the hose with a shut off valve,
 - (2) Install a dry break coupling between the valve and the probe,
 - (3) Close the shut-off valve before disconnecting the probe.

PPE FOR ALL TRANSFER SYSTEMS

In addition, mixers and loaders using all systems 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

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--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)].

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water except as specified on this label. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply when weather conditions favor drift from areas to be treated.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical prior to flooding may result in shallow groundwater contamination due to cracks in the subsoil of the rice paddy.

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.

PHYSICAL AND CHEMICAL HAZARDS

Do not use, pour, spill 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.

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

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 a plants, soil or water is:

- Coveralls
- Chemical-resistant gloves, made of waterproof materials, such as butyl rubber >14 mils, nitrile rubber >14 mils, or neoprene rubber >14 mils.
- Chemical-resistant footwear plus socks
- Protective Eyewear

STORAGE AND DISPOSAL

PESTICIDE 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. Store at temperature above 32°F. If product is allowed to freeze, warm to 50°F and agitate before using. Containers should not be stacked more than three (3) containers high. Reclose all partially used containers by thoroughly tightening screw cap. Damaged or leaking containers that contain product that cannot be used immediately should be transferred to suitable sound containers and properly marked. Any spilled material should be thoroughly absorbed with a suitable absorbent, swept up and transferred to a new or waste container for disposal 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. Keep containers closed when not in use.

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:

Nonrefillable Container: Do not reuse or refill this container. Offer for recycling if available. Clean container promptly after emptying.

Nonrefillable container equal to or less than 5 gallons: 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 ¼ 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.

Nonrefillable container 5 gallons to bulk: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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. Turn the container over onto its other 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:** Triple rinse (or equivalent), adding rinsate to spray tank. Offer rinsed containers 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.~~

BULK CONTAINER DISPOSAL: When the container is empty, replace the cap and seal all openings that have been opened during use; and return the container to the point of purchase, or to a designated location (specified by RiceCo LLC). This container must only be refilled with this pesticide product. **Do**

Not Reuse the Container for Any Other Purpose. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, contact RiceCo LLC at 1-888-835-1313. If not returned to the point of purchase or to a designated location, triple rinse empty container and offer for recycling. Disposal of this container must be in compliance with state and local regulations.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate ignition sources. Ventilate area. Avoid breathing vapors. Use MSHA/NIOSH self-contained breathing apparatus or air mask for large spills in confined areas. Dike the spill with inert material (sand, earth, fuller's earth, etc.) And, if appropriate, transfer the liquid and solid diking material to separate containers for recovery or disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Wash clothing before reuse. Keep out of all sewers and open holes bodies of water. REFER TO PRECAUTIONARY STATEMENTS.

GENERAL PRECAUTIONS AND RESTRICTIONS

Do not apply to any crop other than rice. **PROPANIL EC** herbicide injures most crops except cereal grains and perennial grasses. Avoid drift or accidental application from turning aircraft on cotton, soybeans, corn, safflower, seedling legumes, vegetables, orchards, vineyards, gardens, shrubs and ornamentals. Once applied, it does not release fumes hazardous to nearby crops.

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

Water drained from treated rice fields must not be used to irrigate other crops or released within 2 miles upstream of a potable water intake in flowing water (e.g., river, stream, etc.) or within 2 miles of a potable water intake in a standing body of water, such as a lake, pond or reservoir.

Applications to fields where 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 fields during the 12 months following treatment.

Do Not apply when temperature exceeds 90°F.

Do not plant or transplant crops in the treated area for at least 60 days follow an application of this product.

Do not apply more than 6 quarts **PROPANIL EC** (6.0 lbs active ingredient) per acre per application. Do not apply more than 8 quarts **PROPANIL EC** (8.0 lbs. active ingredient) per acre per season.

Do not apply within 60 days of harvest.

GENERAL INFORMATION

(FOR RICE GROWN IN THE SOUTHERN UNITED STATES ONLY)

PROPANIL EC is a selective postemergence herbicide for use in rice only for control of the following weeds:

- *BARNYARDGRASS (WATERGRASS)
- BEAKRUSH (SPEARHEAD)
- COCKSPUR, GULF
- CRABGRASS SPECIES
- CROTON, WOOLLY
- DOCK, CURLY
- FOXTAIL SPECIES
- GOOSEGRASS
- HOORAH GRASS

- Echinochloa crus-gali, E. Colonom*
- Rhynchospora corniculata*
- Echinochloa cruz-pavonis*
- Digitaria spp.*
- Croton capitus*
- Rumex crispus*
- Setaria spp.*
- Eleusine indica*
- Fimbristylis miliaceae*

MEXICANWEED
PANICUM, TEXAS
PARAGRASS
PIGWEEED, REDROOT
REDWEED
SESBANIA, HEMP (COFFEEBEAN)
SIGNALGRASS, BROADLEAF
SPIKERUSH (WIREGRASS)

Caperonia castanaefolia
Panicum texanum
Panicum purpurascens
Amaranthus retroflexus
Melochia corchorifolia
Sesbania exaltata
Bracharia platyphytia
Eleocharis spp.

*Biotypes of barnyardgrass may develop that cannot be effectively controlled by propanil alone. Where these biotypes are known or suspected to be present, and are found in a mixed weed population in which **PROPANIL EC** is effective, a tank mixture of **PROPANIL EC** at 4 quarts (4 pounds active) per acre with either Prowl® at 1.5 to 2 pints/A or Bolero® 8EC at 3 to 4 pints/A or Facet® at labeled rates is recommended to control barnyardgrass (up to 3 leaf stage). These tank mixtures may reduce crop tolerance and are applied at the user's risk.

Read and observe all label directions before using. When tank mixing, always read all individual manufacturers labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

PROPANIL EC is an emulsifiable concentrate containing 4 pounds active ingredient per U.S. gallon. **PROPANIL EC** is not a hormone-type herbicide, but kills susceptible weeds by direct contact action. For this reason, thorough coverage of emerged weeds is essential for best results. Only weeds that have emerged and are exposed at time of application will be controlled. **PROPANIL EC** has no pre-emergence or residual herbicidal activity. Apply **PROPANIL EC** herbicide only to fields that have been drained of floodwater. **PROPANIL EC** is most effective if applied when susceptible grasses and broadleaf weeds are small and growing actively under favorable soil moisture and weather conditions. Early weed control removes competition, saves moisture and generally contributes to increased yields.

TIMING AND DOSAGE RECOMMENDATIONS

Treat grassy and weedy fields when a satisfactory stand of rice that will tolerate flooding is established. The amount of **PROPANIL EC** herbicide to apply depends primarily upon the stage and growth condition of the grasses. The growth stage of the rice is also a factor in dosage and timing limitations, so as to avoid the possibility of excessive residues. For best results apply **PROPANIL EC** herbicide at the rate of 3 to 4 quarts (3 to 4 pounds active) per acre when the grasses are actively growing in the 1 to early 4- leaf stage. This rate will also control many seedling broadleaf and aquatic weeds. Generally this will be 15 to 25 days after planting of the rice. In order to insure satisfactory weed control, do not apply less than 3 quarts of **PROPANIL EC** herbicide per acre in a single spray application.

Apply **PROPANIL EC** herbicide at the rate of 4 to 6 quarts (4 to 6 lbs. active) per acre to actively growing grasses in the 4 to 6 leaf and early tillering stage or when they are in the 2 to 4 leaf stage but stressed under dry soil conditions. Generally this will be 20 to 30 days after planting of the rice.

EMERGENCY TREATMENT: Apply **PROPANIL EC** herbicide at the rate of 5 to 6 quarts (5 to 6 lbs. active) in 15 gallons of spray per acre for emergency control of older tillering grass. Generally this will be 30 to 40 days after planting. If the field is already flooded, the water should be lowered or drained before spraying to expose more of the grass and weeds. Emergency treatment should be considered as a salvage operation only and cannot be relied upon for total control of grass and weeds.

TO AVOID EXCESSIVE RESIDUES AT HARVEST, DO NOT APPLY AFTER THE END OF TILLERING FOR THE RICE VARIETY BEING TREATED. DO NOT APPLY MORE THAN A MAXIMUM OF SIX POUNDS ACTIVE INGREDIENT PER ACRE IN A SINGLE APPLICATION OR EXCEED EIGHT POUNDS ACTIVE INGREDIENT PER ACRE TOTAL DOSAGE PER SEASON.

APPLICATION EQUIPMENT

Aircraft - Fixed wing aircraft or helicopters should have well-designed spray systems that produce a uniform pattern of medium-fine spray droplets. Apply **PROPANIL EC** herbicide on small grass in no less

than 10 gallons of total spray per acre with boom-nozzle sprayers. Increase volume to 12 to 15 gallons per acre for larger or denser stands of grass or during periods of low humidity. The optimum effective spray swath width depends on operating conditions and type of aircraft being used. For uniform spray coverage with fixed-wing aircraft, do not exceed a spray swath width of 10 percent greater than the wingspan or the length of the boom in helicopters. Measure the swaths accurately for flagging. (See Spray Drift Management section for additional aerial application requirements.)

GROUND SPRAYERS – Use standard low-pressure herbicide sprayers equipped with boom and flat fan nozzles. Use nozzle sizes that deliver a medium-fine droplet in 15 to 20 gallons total spray per acre at 40 to 50 psi and at ground speeds not in excess of 3 to 4 mph. Avoid raising boom too high. Spray patterns should meet uniformly. Flush all equipment with clear water after each day's use. Clean all equipment, including nurse tanks used for **PROPANIL EC** herbicide, with detergent wash followed by a water rinse, BEFORE AND AFTER spraying other pesticides or other crops. (See Spray Drift Management section for additional ground application requirements.)

CROP TOLERANCE AND GROWING CONDITIONS

All leading commercial varieties of rice are exceptionally tolerant to **PROPANIL EC** herbicide. A temporary yellowing or tip burn may be noted after treatment, but new growth is normal. Severe leaf burn and partial killing of rice may occur if the product is applied when rice is under stress and in a weakened growth condition due to disease or insect infestations, excessive soil salts, over watering, or prolonged drought and extremely hot weather. Growers are cautioned not to spray under such conditions and/or when maximum daily temperatures have been or are expected to go above 100°F.

EFFECT OF CLIMATIC CONDITIONS AND CULTURAL PRACTICES ON WEED CONTROL

Field and Seedbed Preparation

Fields should be accurately leveled and contoured and have well-prepared seedbeds free of clods. This encourages uniform and rapid emergence of rice, grass and broadleaf weeds and permits better timing and coverage of **PROPANIL EC** herbicide sprays resulting in optimum weed control.

Water Management

Before application of **PROPANIL EC** herbicide, drained or dry planted fields should be flushed as often as needed to prevent drying and crusting. Flushing encourages uniform emergence and vigorous growth of grass, broadleaf weeds and rice which is essential for best results. Flush fields in sufficient time so that weeds and rice are actively growing at time of treatment. Make sure the field is drained prior to treatment so that grasses and broadleaf weeds are fully exposed. Weeds that are partially submerged in standing water at time of application will not be satisfactorily controlled. **Preflood Spray Treatment:** After treatment, treated fields should always be flooded before a second infestation of grass has a chance to develop. To prevent more grass from germinating after treatment, fields should be flooded as soon as possible after 24 hours.

Temperature

The temperature a few days before and after applying **PROPANIL EC** has an important bearing on the weed-killing activity. The activity increases as daily maximum temperatures increase above 75°F and decreases as the daily maximum temperatures decline below 75°F. Do not apply **PROPANIL EC** when maximum temperatures have been or are expected to stay below 65°F or to go above 100°F. Low temperatures at time of application are not so important as long as it warms up later during the day.

Relative Humidity and Rain

Grasses and weeds are more responsive to **PROPANIL EC** herbicide during periods of high humidity when the foliage is moist or covered by dew. When the humidity is very low, increase spray volume to 12 to 15 gallons per acre for best results. Do not spray when rains threatens within eight hours, to avoid loss of the spray deposit before adsorption by the grass.

Wind

Avoid applications when the wind speed exceeds 10 mph because of drift hazard to sensitive crops and the possibility of uneven (streaked) applications.

COMPATIBILITY WITH OTHER CHEMICALS

Tank-mix applications of **PROPANIL EC** herbicide with other herbicides, insecticides, or liquid fertilizers may reduce crop tolerance and/or weed control or impair mixing properties. Use of these products in tank-mix application with **PROPANIL EC** herbicide is done at the users risks.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from the aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

Apply only when the wind speed is less than or equal to 10 mph at the application site.
Apply as a medium or coarser spray (ASAE standard 572)

Additional requirements for ground applications:

Apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

Additional requirements for aerial applications:

Do not apply by air if drift can occur to sensitive nontarget crops or plants that are within 100 feet of the application site.

Do not release spray at a height greater than 10 feet above the ground or crop canopy.

Do not make any type of application into temperature inversions

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they should be observed.
3. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

AERIAL DRIFT REDUCTION ADVISORY INFORMATION

Importance of 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. 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 Inversion sections of this label.)

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 – Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy protection. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of nozzles – Use the minimum number of nozzles that provide uniform coverage.

Nozzle Orientation – Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from the 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 larger droplets than other nozzle types.

Boom Length – For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height – Applications should not be made at a height 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 cross-wind, the swath will be displaced downwind. Therefore, on the up and 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 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 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 shall 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 the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves literally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

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

EMERGENCY RELEASE PROVISION

Water holding (discharge) intervals for flood water following propanil application in all states.

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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 application, 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 will be 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 application unless excessive rainfall completely submerges the rice crop and forces premature release. Delayed flood (water-seeded) rice in Louisiana, north of Highway 14 boundary, is subject to the 7-day water holding interval provisions.

For permanent flood (water-seeded) rice grown in California and all other parts of the US 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.

Insecticides

Severe injury or kill of rice plants may result from tank-mix combinations or separate sprays of **PROPANIL EC** herbicide and certain insecticides. Do not combine **PROPANIL EC** herbicide with carbamates insecticides, such as carbaryl (Sevin, etc.), Methomyl (Lannate, Nudrin, etc.), or organophosphate insecticides such as parathion, methyl parathion, Guthion, malathion, Systox, WPN, Phosphamidron, etc. Do not apply any of the above insecticides to rice fields within 14 days before or after **PROPANIL EC** herbicide. Do not use carbamates or systemic organophosphorus insecticides on rice fields to be treated with **PROPANIL EC** herbicide. Do not apply to rice fields that were planted with rice seed treated with bird repellents containing methiocarb such as Mesurol, Borderland Red, etc. Consult local Extension specialist for current recommendations of approved insecticides on rice.

SPRAY MIXTURE PREPARATION

Wet Spray Application

Thoroughly mix **PROPANIL EC** 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 **PROPANIL EC**. 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 **PROPANIL EC** spray preparation within 24 hours of product mixing, or the product may degrade.

Do not store **PROPANIL EC** 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.

Mixing and application equipment exposed to **PROPANIL EC** 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 ¼ to 1/3 full of clean water.
2. While agitating, add the required amount of **PROPANIL EC**.
3. Continue agitation until the product is fully dispersed, at least 5 minutes.
4. Once the **PROPANIL EC** 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 setting occurs, thoroughly re-agitate before using.

7. Apply **PROPANIL EC** spray preparations within 24 hours of product mixing, or the product may degrade.
8. If **PROPANIL EC** 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 **PROPANIL EC**.

SPRAYER CLEANUP

Before using equipment exposed to **PROPANIL EC** 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 one-half full with clean water and add Nutrasol at 32 oz. per 100 gallons 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 one-half full with clean water and add 1 gal. 21% ammonia or 7 gallons 3% ammonia per 100 gallons 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 **PROPANIL EC** 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.

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 **PROPANIL EC**.

CONDITIONS OF SALE AND WARRANTY

RiceCo LLC warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. RICECO LLC MAKE NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of RiceCo LLC and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to weather or soil condition, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. TO THE EXTENT CCNSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL RICECO OR SELLER BE HELD LIABLE FOR

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CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT

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"....from the paddy to the plate"

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