

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

April 24, 2024

Katy DeGroot Regulatory Consultant UPL NA, Inc. c/o Pyxis Regulatory Consulting Inc. 4110 136th St. Ct. NW Gig Harbor, WA 98332

Subject: Label Amendment - Registration Review Mitigation for Propanil and Quinclorac Product Name: RICEPRO EPA Registration Number: 70506-367 Application Dates: May 14, 2021 and February 2, 2022 Decision Numbers: 575790, 581624

Dear Katy DeGroot:

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

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. You must submit one copy of the final printed labeling before you release the product for Page 2 of 2 EPA Reg. No. 70506-367 Decision No. 575790, 581624

shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact DeMariah Koger by phone at (202)-566-2288, or via email at <u>Koger.demariah@epa.gov</u>.

Sincerely,

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Linda Arrington, Branch Chief Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division Office of Pesticide Programs

ENCLOSURE: Stamped label



Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 70506-367

PROPANIL	GROUP	7	HERBICIDE
QUINCLORAC	GROUP	4	HERBICIDE

RicePro®

Herbicide

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

Active Ingredients:	
Propanil: (3', 4'-dichloropropionanilide)43.	00%
Quinclorac: 3, 7-dichloro-8-quinolinecarboxylic	
acid2.	00%
Other Ingredients:55.	00%
TOTAL	00%

This product contains 4 lbs. of propanil per gallon and 0.1875 lb. quinclorac per gallon.

EPA Registration No. 70506-367 EPA Establishment No.: 62171-MS-1, 62171-MS-3

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 swallowed	 Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person. 	
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 treatment advice. 	
If on skin or clothing	 Take off contaminated clothing. Do not reuse contaminated clothing until laundered. Wash skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice if irritation continues. 	
If inhaled	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. 	

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies: call Rocky Mountain Poison and Drug Safety 24 hours a day at 1-866-673-6671.

Manufactured For:

UPL NA Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406 – 1-800-438-6071

NET CONTENTS: 20 LTS. / 200 LTRS. / 30 U.S. GALS. / 2.5 GAL.

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 or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

[Note to EPA reviewer: This section is for formulations NOT packaged with Built-in Probes] Mixers, loaders, ground applicators, and 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, including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, poly-ethylene, polyvinyl chloride (PVC) ≥ 14 mils, Viton ≥ 14 mils,
- Chemical-resistant footwear plus socks,
- Protective eyewear, if the system operates under pressure, and
- Chemical-resistant apron when mixing and loading.

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

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

See Engineering Controls for additional requirements.

[Note to EPA reviewer: This section is for formulations packaged WITH built-in probes] **Mixers, loaders, applicators and other handlers must wear the following:**

- Long-sleeved shirt,
- Long pants

- Shoes plus socks
- Chemical-resistant gloves, including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, poly-ethylene, polyvinyl chloride (PVC) ≥ 14 mils, Viton ≥ 14 mils, 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 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

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

Mixers and loaders must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(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 and coveralls must be provided and be immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown.

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

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

(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.

- \checkmark 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 of 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 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.

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.

PERSONAL PROTECTIVE EQUIPMENT 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

--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, aquatic invertebrates, and birds. This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical where soils are permeable, particularly where the water table is shallow may result in groundwater contamination. Keep out of lakes, ponds and streams. 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. 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 area to be treated.

Groundwater Advisory: Propanil and 3,4-DCA (a major propanil degradate) 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. 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.

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. 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.

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 such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, poly-ethylene, polyvinyl chloride (PVC) ≥ 14 mils, Viton ≥ 14 mils
- Chemical-resistant footwear plus socks, and
- Protective Eyewear

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Do not store in direct sunlight. 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".

Keep containers closed when not in use.

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 HANDLING:

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 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.

Nonrefillable containers 5 gallons to bulk: Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank. Fill the container ¹/₄ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. 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.

GENERAL RESTRICTIONS

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

DO NOT use water from rice cultivation after an application to irrigate any crop other than rice.

DO NOT apply more than 1.5 gallons of **RicePro®** (6.0 lbs propanil plus 0.28 lbs quinclorac) per acre per application.

DO NOT apply more than 2.0 gallons of **RicePro** (8.0 lbs propanil plus 0.38 lbs quinclorac) per acre per year.

The maximum single application rate for quinclorac is 0.75 lbs a.i./acre.

Application to fields where commercial catfish farming is practiced and draining water from treated fields into areas where catfish farming is practiced is prohibited.

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

DO NOT apply **RicePro** directly or indirectly to any crop except rice. **DO NOT** allow this product to drift outside of the intended target areas. (See Spray Drift Management section)

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

DO NOT rotate to crops other than rice for 309 days following application:

- Eggplants and tobacco should not be planted within 12 months on fields treated with this product.

- Tomatoes and carrots should not be planted within 24 months on fields treated with this product.

In case of crop failure, only rice may be immediately replanted.

DO NOT apply within 60 days of harvest.

DO NOT apply to rice that is heading.

DO NOT use on precision-cut fields until the second rice crop, as injury can occur.

DO NOT use on sand and loamy sand soils.

DO NOT apply to rice fields with a history of poor water-holding capacity (porous subsoil), as erratic weed control may result.

DO NOT apply on any rice soil that does not have an impermeable hard pan to provide good water holding capacity.

DO NOT use rice straw or processing byproducts, such as chaff, hulls, etc., as soil amendments or mulch for high value crops, such as bedding stock, vegetable transplants, or ornamental and fruit trees.

DO NOT apply this product when air temperatures exceed 90°F.

Water drained from treated rice fields must not be used to irrigate other crops or released within $\frac{1}{2}$ mile upstream of a potable water intake in flowing water (e.g., river, stream, etc.) or within $\frac{1}{2}$ mile of a potable water intake in a standing body of water, such as a lake, pond or reservoir.

STATE SPECIFIC RESTRICTIONS:

Because there are additional state restrictions in Arkansas, contact the Arkansas State Plant Board or a representative for specific instructions about applying this product in Arkansas.

In Arkansas, this product must not be applied in an area from one mile west of Highway #1 to one mile east of Highway # 163 from the Craighead - Poinsett Country line to the Cross - Poinsett County line. In addition, **NO AERIAL APPLICATION** is allowed in the area of Poinsett County one mile west of Highway # 1 to two miles west of Highway # 1 and one mile east of Highway # 163 to Ditch # 10 from the Craighead - Poinsett County line to the Cross - Poinsett county line.

DO NOT use this product in California or Florida.

WHERE TO USE

RicePro is used for postemergent control of broadleaf and grass weeds in RICE fields. **RicePro** can be used on **CLEARFIELD**® rice in combination with labeled rates and timings of **imazethapyr** for postemergence control of problematic weeds (barnyardgrass, Eclipta, jointvetches, morningglory and hemp sesbania).

WEEDS CONTROLLED

Barnyardgrass (watergrass), brachiaria, broadleaf signalgrass, coffeeweed, crabgrass, croton, curly indigo, eclipta, foxtail, goosegrass, gulf cockspur, hemp sesbania, jointvetches, junglerice, mexicanweed, millet (Texas), morningglories (cypress vine, entireleaf, ivyleaf, palmleaf, purple moonflower, pitted, tall), 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 **RicePro.** 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 with 40 psi maximum spray pressure, and for surface (ground) applications 20-30 gallons of carrier per acre at 25 - 40 psi 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 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. Optimum weed control with this product is highly dependent on proper use of irrigation, including effective flush irrigation to maintain moist soil conditions and timely establishment of permanent flood water. Soil applications and residual activity from foliar applications require moist soil conditions for weeds to uptake the herbicide and be controlled. Therefore, keep the soil moist to maintain weed control. If the soil is permitted to dry and weeds emerge, flush irrigate the field to reactivate the residual activity of the herbicide while weeds are small (1" or less). If required make additional applications as needed, but limit total usage to 8 qts. per acre per season. In water-seeded rice plantings and in pin-point flood culture, drain all water from the rice field and ensure seedling rice has at least two leaves before applying. Rice seedlings without 2 leaves could be injured. Form flood water levees prior to application for more consistent weed control. Residual weed control on the levee is dependent on moist soil conditions on the levee. If soil on the levee dries, erratic weed control could result. Should a heavy rain occur after application, drain the excess water from the rice field to avoid possible rice injury.

Weather conditions must be observed closely. Under cool weather conditions higher rates are required to achieve satisfactory control.

Rice is tolerant to this product when used according to the label use direction and under typical growing conditions. Adverse weather conditions or high use rate from spray overlap or other sources may contribute to leaf twisting, buggy whipping or other abnormal growth characteristics. In broadcast or water-seeded rice, seed on the soil surface in direct contact with

this product is the most sensitive. These symptoms are typically short-lived and rice usually recovers without a significant stand loss or other injury.

APPLICATION EQUIPMENT: Whenever possible spray mixtures should be applied using ground spray equipment. Ensure ground and aircraft spray equipment is properly calibrated and spray coverage is uniform.

AIR APPLICATION: If application with ground spray equipment is not possible, application by aircraft is acceptable, provided the aerial applicator understands the risks and assumes the liability associated with accidental spray drift from aerial application. Do not make spray applications when wind speed is greater than 8 mph, when air temperatures exceed 90°F, or when environmental conditions exist for temperature inversions (See Spray Drift Management section.)

WEATHER CONDITIONS:

<u>**Temperature:**</u> 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 90°F. Control decreased with temperatures below 75°F and increases with temperatures above 75°F.

<u>Application Timing</u>: RicePro 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 **RicePro** 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 **RicePro**, have produced better results in weed control.

<u>Relative Humidity</u>: RicePro 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.

<u>Soil Moisture</u>: Under dry conditions grass and broadleaf weeds are less susceptible to control. Higher rates of product, up to 6 quarts (6 lbs. propanil plus 0.281 lb. quinclorac) per acre, should be used to achieve control.

WEED RESISTANCE MANAGEMENT

For resistance management, **RicePro** contains both a Group 4 and a Group 7 herbicide. Any weed population may contain or develop plants naturally resistant to **RicePro** and other Group 4 and Group 7 herbicides. Weed species with acquired resistance to Group 2 and Group 7 herbicides may eventually dominate the weed population if Group 4 and Group 7 herbicides are used repeatedly in the same filed or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by **RicePro** or other Group 4 and Group 7 herbicides. Users should scout before and after application.

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 a 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.

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

- Rotate the use of **RicePro** or other Group 4 and Group 7 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose Page 8 of 18 applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

For further information or to report suspected resistance, contact UPL NA Inc. representative at 1-800-438-6071. In addition to the guidance above, registrants are encouraged to incorporate the appropriate elements of Best Management Practices from HRAC and WSSA on the label.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- Do not release spray at height greater than 10 feet 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 manufacturer' 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 greater than 10 mph, the boom length must be 65% or less of the wingspan 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 ½ swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds are greater than 10 mph at the application site.
- 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 2.5 feet above the ground or crop canopy.
- Applicators are required select the nozzle and pressure that deliver medium or coarser droplets a indicated in manufacturer's catalogue and in accordance with American Society of Agriculture & Biological Engineers Standard 572 (ASABE S572).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size – Ground Boom

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

Controlling Droplet Size – Aircraft

• Adjust nozzles - Follow nozzle manufacturer's 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 temperatures 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

EMERGENCY RELEASE PROVISION

Water holding (discharge) intervals for flood water following propanil application 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 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 rice 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.

ADJUVANTS AND APPLICATION AIDS:

When **RicePro** 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 **RicePro** 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 (leaftip burn.)

DRIFT CONTROL AIDS:

Drift control product should always be added to the spray solution to affect spray droplet size and other characteristics, reducing the potential of off-target accidental spray drift.

Consult Extension Service for detailed application advice.

BROADCAST RATE

Apply 3 quarts of **RicePro** (3 lbs propanil plus 0.14 lbs quinclorac) per acre when most grasses have reached the 1 to 3-leaf stage. Use 4 to 6 quarts of product (4 to 6 lbs propanil plus 0.1875 to 0.2813 lbs quinclorac) 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.

Tank Mix Option: RicePro may be tank mixed with a postemergent rice products containing **pendimethalin, quinclorac or imazethapyr** to extend residual control plus broaden weed spectrum at 3-4 quarts per acre (depending upon weed size and timing). Consult product labels for surfactant recommendations.

An additional application of any propanil formulation can be made prior to flood as long as no single application exceeds 6 lb. a.i. per acre or a total of 8 lbs. a.i. per acre per year.

When tank mixing with another herbicide, refer to the respective label for rates, methods of application, weeds controlled, proper timing, restrictions and precautions. Always use in accordance with the most restrictive label restrictions and precautions making sure no label dosages are exceeded.

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

SPRAY MIXTURE PREPARATION

Wet Spray Application

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

Do not store **RicePro** 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 **RicePro** 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 $\frac{1}{2}$ or more of clean water.
- 2. While agitating, add the required amount of **RicePro.**
- 3. Continue agitation until the product is fully dispersed, at least 5 minutes.
- 4. Once the **RicePro** 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 **RicePro** spray preparations within 24 hours of product mixing, or the product may degrade.
- 8. If **RicePro** 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 **RicePro**.

SPRAYER CLEANUP

Before using equipment exposed to **RicePro** 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 gal. of 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. of 21% ammonia or 7 gal. of 3% ammonia per 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 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 **RicePro** 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 **RicePro**.

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The directions for use of this product are believed to be reliable and must 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 UPL NA Inc. or the Seller. UPL NA Inc. 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. To the extent consistent with applicable law, UPL NA Inc. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED warranty. To the fullest extent permitted by law, in no case shall UPL NA Inc. 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 UPL NA Inc. representative.

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[EPA APPROVAL DATE]