

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460

^{5P)}
i.w. 94123-3

Date of Issuance:

6/20/19

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance:
Unconditional

EPA Reg. Number:

Name of Pesticide Product:

PROPANIL 4EC HERBICIDE

Name and Address of Registrant (include ZIP Code):

Orion OMT, LLC 340 W. 32nd Street #383 Yuma, Az 85364

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official: Date:

Reuben Baris, Product Manager 25

Herbicides Branch, Registration Division (7505P)

6/20/19

EPA Form 8570-6

- 2. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 94123-3."
- 3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

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.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 12/30/2018
- Alternate CSF 1 dated 12/30/2018

If you have any questions, please contact Grant Rowland by phone at 703-347-0254, or via email at rowland.grant@epa.gov.

Enclosure

Note to reviewer:

 $[\textit{Text}] \ \textit{in brackets denotes optional text}$

{Text} in braces denotes where in the final label text will appear.

ACCEPTED 06/20/2019

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 94123-3

PROPANIL 4EC HERBICIDE

For postemergence weed control in rice

PROPANIL	GROUP	7	HERBICIDE

Contains 4 lb active ingredient per gallon.

This product contains the toxic inert ingredient isophorone.

KEEP OUT OF REACH OF CHILDREN WARNING

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 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. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. 	
IF SWALLOWED:	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by the poison control center or doctor. Do not Give anything by mouth to an unconscious person. 	
IF INHALED:	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a Poison control center or doctor for further treatment advice 	

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

For 24-hour medical emergency assistance (human or animal) call **1-800-222-1222**. For chemical emergency assistance (spill, leak, fire, or accident) call ChemTrec at **1-800-424-9300**.

Orion OMT, LLC 340 W. 32nd Street, #383 Yuma, AZ 85364 tel. 928-342-3489 EPA Registration No. 94123-G EPA Est. No. Net Contents:

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

Causes substantial but temporary eye injury. Causes skin irritation. Harmful if swallowed. Do not get in eyes or on skin or clothing. Wear protective eye-wear (goggles or face shield). Prolonged or frequentlly repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

[Editor's Note: The language in this PPE section will be included on the label if the product is packaged with a built-in probe.]

Personal Protective Equipment (PPE)

Handler PPE Requirements for Liquid Concentrate Formulations Packaged without Built-In Probes:

Personal Protective Equipment (PPE)

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

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves made of barrier laminate or butyl rubber >14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear (goggles or face shield)
- Chemical-resistant gloves made of any waterproof material and chemical-resistant apron when mixing/loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- For overhead exposure wear chemical resistant headgear. When cleaning equipment wear a chemical resistant apron.

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 short-sleeved shirt and short pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate or butyl rubber >14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear and
- Chemical-resistant apron
- For overhead exposure wear chemical resistant headgear. When cleaning equipment wear a chemical resistant apron.

See Engineering Controls for additional requirements.

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

[Editor's Note: The language in this PPE section will be included on the label if the product is not packaged with a built-in probe.]

Handler PPE Requirements for All Other Liquid Concentrate Formulations Packaged with Built-in Probes:

Personal Protective Equipment (PPE)

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

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of barrier laminate or butyl rubber >14 mils
- Chemical-resistant apron when mixing/loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- For overhead exposure wear chemical resistant headgear. When cleaning equipment wear a chemical resistant apron.

See Engineering Controls for additional requirements.

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

[Editor's Note: The language in this Engineering Controls section will be included on the label if the product is packaged with a 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 170.240(d)(4)] or dermal protection and must:

• Wear the personal protective equipment required in the PPE section of this label for mixers and loaders.

Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers. Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 1 70.24(d)(6)].

[Editor's Note: The language in this Engineering Controls section will be included on the label if the product is not packaged with a built-in probe.]

Engineering Controls

Mixers and loaders must either (I) 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.

- Do not pour this product from its drum.
- Transfer product from the drum to the mixing tank by use of a suction hose connected at one end to
 the suction pump on the mixing tank and connected at the other end to a probe (dip tube) that is
 inserted through the bung opening into the drum.
- Do not handle the probe or bung in a manner that 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.

Unrinsed Probes

- If an unrinsed probe must be removed from the drum, then use an anti-drip flange and immediately transfer
 the probe into a container of rinse water. The anti-drip flange must be designed to remove excess propanil
 product from the probe as it is extracted from the drum.
- Take the following steps if the probe must be disconnected from the suction hose before both the probe and the hose have been tripled rinsed:
 - o Equip the probe end of the hose with a shut off valve
 - o Install a dry break coupling between the valve and the probe.
 - Close the shut off valve before disconnecting the probe.

PPE

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.
- 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 dripping.

Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers. Pilots must use an enclosed cockpit that meets the requirements listed in WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

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.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. Do not apply when weather conditions favor drift from the area treated. Do not apply where runoff is likely to occur. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Do not contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as specified on this label.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical prior to flooding may result in some 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. Runoff of this product will be reduced by avoiding application 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- to 6-inch flood.

ENDANGERED SPECIES PROTECTION

This product may have effects on endangered species. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county in which you are applying product. To obtain Bulletins, no more than six months before using this product, consult http://www epa.gov/espp/ or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

If endangered plant species occur in proximity to the application site, the following mitigation measures are required: Leave an untreated buffer zone of 200 feet. This product must be applied using a low boom (20 inches above the ground) and ASAE fine to medium/coarse nozzles. To determine whether your county has an endangered species, consult the Web site http://www.epa.gov/espp/usa-map.htm.

Endangered Species Bulletins may also be obtained from extension offices or state pesticide agencies. If the bulletin is not available for your specific area, check with the appropriate local state agency to determine if known populations of endangered species occur in the area to be treated

PHYSICAL AND CHEMICAL HAZARDS

Do not store with, use near, mix, or allow to come in contact with oxidizing agents. Hazardous chemical reactions may occur.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, Propanil 4EC is a Group 7 herbicide. Any weed population may contain or develop plants naturally resistant to Propanil 4EC and other Group 7 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of Propanil 4EC or other 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 from a different group if such use is permitted; where information on resistance in target
 weeds species is available, use the less resistance-prone partner at a rate that will control the target weed(s)
 equally as well as the more resistance-prone partner. Consult your local extension service or certified crop
 advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Fields should be scouted prior to application to identify the weed species present and their growth stage to
 determine if the intended application will be effective. Fields should be scouted after application to verify
 that the treatment was effective.

- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Suspected herbicide-resistant weeds may be identified by these indicators.
 - Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds
 - o A spreading patch of non-controlled plants of a particular weed species; and
 - Surviving plants mixed with controlled individuals of the same species
- 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.

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

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. Do not enter or allow other people or pets to enter the treated area until sprays have dried. 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 (WPS), 40 CFR Pan 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 (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Protective eyewear

PRODUCT INFORMATION

(For Rice Grown in the Following States — Arkansas, Florida, Kansas, Louisiana, Mississippi, Missouri, South Carolina, Texas)

Propanil 4EC for postemergence weed control in rice is formulated as an emulsifiable concentrate containing 4 lb active ingredient per gallon. Propanil 4EC is not a hormone-type herbicide but kills susceptible weeds by direct

contact action. For this reason, thorough spray coverage of emerged weeds is essential for best results. Propanil 4EC has no preemergence or residual herbicidal activity in soil. Only weeds that have emerged and are exposed at time of application will be controlled.

Apply Propanil 4EC only to fields that have been drained of floodwater. Propanil 4EC 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 weed competition from the rice crop, saves moisture, and generally contributes to increased yields.

Read Mixing and Equipment label instructions before application. When tank mixing, always read all individual manufacturer's labels. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Precaution

 Avoid drift or accidental application from turning aircraft on beans, cotton, soybeans, corn, safflower, seedling legumes, cucurbits, vegetables, orchards, vineyards, gardens, shrubs and ornamentals. Once applied, Propanil 4EC does not release fumes hazardous to nearby crops.

Restrictions

- Preharvest Interval: Do not apply this product within 60 days of rice harvest.
- Chemigation: Do not apply this product through any type of irrigation system.
- Do not apply more than a maximum of 6 quarts of Propanil 4EC (6 lb active ingredient) per acre in a single application or exceed 8 quarts of Propanil 4EC (8 lb active ingredient) per acre total dosage per season.
- Do not apply this product (directly or indirectly) to wild rice (Zizania spp.).
- Application to fields where catfish farming is practiced and draining water from treated fields into areas where catfish farming is practiced is prohibited for 12 months following treatment.
- Do not graze treated fields or feed treated forage within 60 days of the last application.
- Do not apply when weather conditions favor drift from area to be treated.
- Do not plant or transplant crops in the treated area for at least 60 days following an application of this product.
- Do not rotate treated land to other crops or transplant to crops other than rice for 60 days following treatment of this product.
- Do not apply this product within 14 days before or after carbamate or organophosphate insecticide applications. Otherwise, serious injuries to rice may occur.
- 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.
- Combustible. Do not use or store near heat or open flame

Emergency Release Provision

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

• For delayed flood (water-seeded) rice grown south of Interstate Highway 10 from the Texas/Louisiana border to Houston and east of State Highway 35 from Houston to Port Lavaca — Flood water must be

held for 10 days after 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 is 7 days.

- For delayed flood (water-seeded) rice in southern Louisiana south of Highway 14 Flood water must be held for 1 5 days after propanil application unless excessive rainfall completely submerges the rice crop and forces premature release. For delayed flood (water-seeded) rice in Louisiana, north of the Highway 14 boundary, the water holding interval is 7 days.
- For rice in California and all other parts of the United States not mentioned above Flood water must be held for 7 days after application unless excessive rainfall completely submerges the rice crop and forces premature release.

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 14 feet above the ground or crop canopy.
- The boom length must not exceed 70% of the wingspan or 85% of the rotor blade diameter.
- Do not make aerial applications 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.

Spray Drift Management (Aerial Application)

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 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).
- For ground applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.
- 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. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter. Do not make any type of application into temperature inversions.
- 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 must be observed.

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

Aerial Drift Reduction Advisory

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. 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 Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size
 and does not improve canopy penetration. 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 parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length: For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or 90% of the rotor blade diameter 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 crosswind, 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 to 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 spray 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 local, low level 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 temperature 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 the 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: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

WEEDS CONTROLLED

Propanil 4EC provides selective postemergence control of the following weeds in rice:

Common Name	Scientific Name	
Annual sedges	Cyperus spp.	
Barnyardgrass ^a	Echinochloa crus-galli	
Beakrush (spearhead)	Rhynchospora corniculata	
Broadleaf signalgrass	Bracharia platyphytia	
Crabgrass	Digitaria spp.	
Curly dock	Rumex crispus	
Foxtail	Setaria spp.	
Goosegrass	Eleusine indica	
Gulf cockspur	Echinochloa crus-pavonis	
Hemp sesbania (coffeebean)	Sesbania herbacea	
Hoorahgrass	Fimbristylis miliaceae	
Junglerice ^a	Echinochloa colonum	
Mexicanweed	Caperonia castanaefolia	
Paragrass	Panicum purpurascens	
Redroot pigweed	Amaranthus retroflexus	
Redweed	Melochia corchorifolia	
Rice flatsedge	Cyperus iria	
Smallflower umbrella plant	Cyperus difformis	
Spikerush (wiregrass)	Eleocharis spp.	
Texas panicum	Panicum texanum	
Watergrass ^a	Echinochloa spp.	
Woolly croton	Croton spp.	

^a In isolated instances, biotypes of barnyardgrass/watergrass 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 4EC is effective, tank mix Propanil 4EC at labeled rate with other rice herbicides that are recommended for control of barnyardgrass/watergrass (up to the 3 leaf stage).

Timing and Dosage

Early Timing and Rates

Apply Propanil 4EC when a satisfactory stand of rice has been established that will tolerate flooding. The amount of Propanil 4EC to apply depends upon the growth stage and condition of the target weeds. Propanil 4EC is most effective if applied when susceptible grasses and broadleaf weeds are small and actively growing under favorable soil moisture and weather conditions. Use a higher rate in the rate range for heavy weed infestations, weeds in advanced stages of growth, or when growing conditions are less than optimum.

Restriction: Emergency treatments made to weeds in advanced growth stages, such as when grass weeds are tillering, must occur at least 60 days before harvest.

For best results apply Propanil 4EC at the rate of 3 to 4 quarts (3 to 4 lb active ingredient) 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.

Mid-Timing and Rates

Apply Propanil 4EC at the rate of 4 to 6 quarts (4 to 6 lb active ingredient) 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.

Rescue Timing and Rates

Apply Propanil 4EC at the rate of 5 to 6 quarts (5 to 6 lb active ingredient) in 12 to 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.

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 4EC in no less than 10 gallons of total spray per acre with boomnozzle 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 upon operating conditions and type of aircraft being used. For uniform spray coverage with fixed wing aircraft or helicopter, spray swath width should not exceed the width of wingspan or rotor plus 10%. Measure the swaths accurately for flagging.

Ground Sprayers

Use standard low-pressure herbicide boom sprayers equipped with 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. Adjust boom height so nozzle spray patterns meet uniformity. Avoid raising boom too high.

Flush all equipment with clearwater after each day's use. Clean all equipment using the procedures below, before and after spraying other pesticides or other crops.

Sprayer Cleanup

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

- 1. Steam-clean tank using a non-chlorine-based detergent, taking care to remove all physical residues.
- 2. Thoroughly rinse sprayer, tanks, boom, and hoses with clean water (free of sediment and agricultural chemicals).
- 3. Fill the tank one-half full of 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 of clean water and add I gallon 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 this product 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.

Restriction: 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 than 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 4EC.

Crop Tolerance and Growing Conditions

All leading commercial varieties of rice are exceptionally tolerant to Propanil 4EC. A temporary yellowing or tip burn of rice may be noted after treatment, but new growth is normal.

Precaution: 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 disaster or insect infestations, excessive soil salts, overwatering, or prolonged drought and extremely hot weather.

Restriction: Do not spray under such conditions and/or when maximum daily temperatures have been or are expected to exceed 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. Such conditions encourage uniform and rapid emergence of rice, grass and broadleaf weeds, allowing more accurate timing and coverage of sprays of Propanil 4EC for optimum weed control.

Water Management

Before application of Propanil 4EC, drained or dry planted fields should be flushed as often as necessary to prevent drying and crusting. Flushing encourages uniform emergence and vigorous growth of grass, broadleaf weeds and rice, which is essential for optimum weed control. Flushing fields should occur when weeds and rice are actively growing at time of treatment.

Precautions:

- 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.

Treated fields should be flooded before a second infestation of grass develops. To prevent additional grass weed seed from germinating, rice fields should be flooded within 24 hours after spraying, or as soon as possible after 24 hours.

Temperature

The temperature a few days before and after applying Propanil 4EC has an important effect 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.

Restriction: Do not apply Propanil 4EC when maximum temperatures have been or are expected to stay below 65° F or exceed 100° F. Less than optimum temperature at time of application is not critical so long as the temperature exceeds 75° F during the day.

Relative Humidity and Rain

Grasses and weeds are more responsive to Propanil 4EC during periods of high humidity when the foliage is moist or covered by dew. When the humidity is very low, spray tends to evaporate before reaching weed foliage. For best results under low relative humidity conditions, increase spray volume to 12 to 15 gallons per acre.

Restriction: Do not spray if rain is expected within 8 hours to avoid loss of deposited spray and herbicide absorption by the weeds.

Wind

Restriction: Do not apply when the wind speed exceeds 10 mph to avoid drift hazard to sensitive crops and the possibility of uneven (streaked) applications.

Compatibility with Other Chemicals

Tank mix applications of Propanil 4EC with other herbicides, insecticides, spray adjuvants or liquid fertilizers may reduce crop tolerance and/or weed control or impair mixing properties. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Adverse Reaction to Insecticides

Precaution: Rice plants may be severely injured or killed if Propanil 4EC is applied in tank mix combinations or sequentially before or after certain insecticides.

Restrictions:

- Do not tank mix Propanil 4EC with carbamate insecticides such as carbaryl, etc., or organophosphorus insecticides (such as malathion and methyl parathion, etc.).
- Do not apply any of the carbamate or organophosphorus insecticides to rice fields within 14 days before or after applying Propanil 4EC.
- Do not apply Propanil 4EC to rice fields planted with rice seed treated with bird repellents containing methiocarb.

Consult local extension specialist for current recommendations of approved insecticides on rice.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Ground all metal containers when transferring product. Protect from freezing. If stored below 32°F and crystals form, warm to 72°F for 24 hours, periodically shaking or rolling container to reconstitute.

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 region office for guidance.

CONTAINER HANDLING:

Nonrefillable containers less than or equal to 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the

remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full of 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. Offer for recycling, if available, or dispose of empty containers in a sanitary landfill or by other procedures approved by state and local authorities.

Nonrefillable containers greater than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse container, (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full of 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. Offer for recycling, if available, or dispose of empty containers in a sanitary landfill or by other procedures approved by state and local authorities.

Steps to be Taken if 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 bodies of water. Refer to Precautionary Statements.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY NOTICE:

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

The Directions for Use of this product must be followed carefully. The Directions for Use of this product reflect the opinion of experts based on field use and tests. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ORION OMT, LLC or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of ORION OMT, LLC and Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ORION OMT, LLC and Seller harmless for any claims relating to such factors. ORION OMT, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or ORION OMT, LLC, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ORION OMT, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE. To the extent consistent with applicable law, ORION OMT, LLC or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ORION OMT, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE, AT THE ELECTION OF ORION OMT, LLC OR SELLER, THE REPLACEMENT

OF THE PRODUCT, OR COMPENSATION LIMITED TO DAMAGES NOT EXCEEDING THE FAIR MARKET PURCHASE PRICE, AND SHALL NOT INCLUDE INCIDENTAL OR CONSEQUENTIAL DAMAGES.

ORION OMT, LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of ORION OMT, LLC.