

# PROPANILO-4

CONTAINS FOUR POUNDS OF PROPANIL PER USEFUL FOR THE CONTROL OF CERTAIN WEEDS

<b>ACTIVE INGREDIENT:</b>		
3, 4-Dichloropropionanilide*	45.4%	
<b>INERT INGREDIENT:</b>	54.6%	
<b>TOTAL</b>	<b>100%</b>	
*PROPANIL. Contains 4 lbs. Propanil per gallon.		

**CAUTION: KEEP OUT OF REACH OF CHILDREN**

Avoid breathing spray mist. Harmful if swallowed, absorbed through the skin. Do not get in eyes or on skin or in clothing. In case of contact, flush skin and eyes with plenty of water; for eyes—get medical attention. May cause skin irritation.

**ANTIDOTE.** If taken internally induce vomiting and call a physician at once. Do not store near feed or food.

This product is toxic to fish. Keep out of lakes, streams, or ponds. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment, or disposal of wastes.

Do not store at temperatures below 32 F.

**DO NOT USE, POUR, SPILL, OR STORE NEAR HEAT OR OPEN FLAME.**

Apply this product only as specified on this label.

**READ ENTIRE LABEL BEFORE USING THIS PRODUCT**

Use of this product in a manner not in accordance with the information on this label may injure or kill humans, domestic animals, wildlife, aquatic life, desirable plants, create excessive and unlawful chemical residues, or produce other undesirable results.

**DIRECTIONS FOR USE:**

PROPANILO-4 is a selective post-emergence herbicide for control of barnyard grass and certain other weeds in rice. PROPANILO-4 contains 4 lbs active ingredient per gallon and is mixed with water for spraying. To avoid injury to rice, do not mix with insecticides or liquid fertilizer or apply them separately either before or after PROPANILO-4 treatment, unless such treatments are recommended by State Agricultural Experiment Station or Extension Service Weed Specialist's following thorough testing.

**TIMING AND DOSAGE:** Use at 3 to 6 quarts (3 to 6 lbs. active) per acre according to the stage and condition of growth of grass. Grasses and weeds should be succulent and growing actively when treated. Optimum temperatures are from 65 to 90 F. Do not use when daytime temperatures below 50 or above 100 F. are expected. The higher dosage is required for stunted, deep rooted grasses growing in very dry surface soil, and for large-tillering grass. Usually one application is sufficient. If retreatment is necessary, apply as soon as need is evident.

Use 3 quarts PROPANILO-4 (3 lbs. active) per acre for actively growing grass in 1 to early 4-leaf stage with shallow roots.

Use 4 to 4½ quarts PROPANILO-4 (4 to 4½ lbs. active) per acre for actively growing grass in 4 to 5 leaf and early tillering stage, or for stunted 1 to 4 leaf grass with deeper roots growing in dry soil.

Use 5 to 6 quarts PROPANILO-4 (5 to 6 lbs. active) per acre for tillering grass, 8 to 12 inches tall, only in emergency conditions. Only partial control may be expected.

**TO AVOID RESIDUES AT HARVEST DO NOT APPLY AFTER FULL TILLERING OF RICE OR WITHIN 56 DAYS BEFORE HARVEST. DO NOT EXCEED A TOTAL OF 8 LBS. ACTIVE PER ACRE PER SEASON.**

**METHOD OF SEEDING:** PROPANILO-4 may be used on dry planted (drilled or broadcast) or on muddy or clear water planted rice. For best results, fields should be uniformly level and have well prepared seedbeds free of large clods to encourage uniform and rapid emergence of rice, grass and weeds. Adequate inlets, drains and cross-levees should be provided to permit quick draining, flushing or flooding before and after treatment to meet the optimum water requirements for the rice crop and for optimum use of PROPANILO-4 in grass control.

**WATER MANAGEMENT BEFORE TREATMENT.**

**DRY PLANTING** Plant in a moist seedbed, or flush to germinate the rice.

**MUDDY WATER PLANTING.** The planting flood is usually drained 1 to 3 days after seeding.

**CLEAR WATER PLANTING:** Planting flood may be deep or shallow but is lowered as soon as the rice is "pegged". Maintain a shallow flood or intermittent flushing until the rice is well rooted. Avoid deep flooding from time of pegging until treatment; this encourages tall, spindly rice which may lodge in the mud after draining.

**IN ALL METHODS OF PLANTING, FLUSH THE FIELDS AS OFTEN AS NEEDED TO PREVENT DRYING AND SOIL CRUSTING AND TO AID THE EMERGENCE OF RICE AND GRASS. DURING PERIODS OF HIGH TEMPERATURE, DRYING WINDS AND LOW RAINFALL, IT IS ESPECIALLY IMPORTANT TO FLUSH OFTEN ENOUGH TO KEEP THE GRASS GROWING ACTIVELY AND THUS MORE SUSCEPTIBLE TO THE OPTIMUM DOSAGE OF PROPANILO-4. ALL OR MOST OF THE WATER SHOULD BE OFF THE FIELD AT THE TIME OF SPRAYING TO ALLOW FULL COVERAGE OF THE GRASSES AND WEEDS.**

Treat grassy and weedy fields with PROPANILO-4 when a satisfactory stand of rice that tolerates flooding is established. Follow the recommendations according to the stage and condition of the growth of the grass as shown above under Timing and Dosage.

**WATER MANAGEMENT AFTER TREATMENT:** TREATED FIELDS SHOULD ALWAYS BE FLOODED BEFORE A SECOND INFESTATION OF GRASS HAS A CHANCE TO DEVELOP BEYOND THE ONE-LEAF STAGE. Start flooding in 12 to 24 hours in warm, sunny weather if treatment has been made on actively growing grass in moist soil. During cool, cloudy weather or if treatment is made on slowly growing grass in dry soil, delay flooding until 2 to 5 days afterwards to allow maximum time for kill. Cover the grass completely and maintain the flood at least 2 inches deep on the highest parts of the field even though the rice is submerged temporarily. As the rice grows above the water, deepen the flood accordingly. In general, rice can be grown with shallower flooding after PROPANILO-4 treatment than when water flooding after is used for grass control.

**FERTILIZER:** Fields to be treated with PROPANILO-4 may be fertilized before or at planting time. Place nitrogenous fertilizer 2 to 4 inches deep to minimize loss during periods when the fields are drained. Fertilizer may also be applied just before flooding. Apply nitrogen at any appropriate time. Do not use PROPANILO-4, fertilizer in combination application.

**APPLICATION EQUIPMENT** Apply PROPANILO-4 with aircraft or ground sprayers. Carefully calibrate and adjust equipment to give medium-fine droplets, in a uniform pattern that provides complete coverage. Flush sprayers with clear water after each day's use. Clean all equipment used for PROPANILO-4 with a detergent rinse, followed by a clear water rinse, before and after spraying other materials or other crops such as cotton, soybeans, vegetables, fruits, etc. Applicators and flagmen should avoid contact with spray mist from PROPANILO-4 or any pesticides and should wear protective clothing and goggles. Wash thoroughly after exposure.

**AIRCRAFT:** Fixed wing or helicopter agricultural aircraft equipped with well designed spray distribution systems that produce a uniform medium-fine droplet spray may be used for PROPANILO-4. Gravity flow fertilizer sprayers or venturi-type spreader-seeders should not be used. Apply PROPANILO-4 in no less than 10 gallons total spray per acre with standard boom-nozzle or with "Swathmaster" sprayers. Somewhat higher gallonages are suggested for extra thick or tall grass. Five gallons per acre appear satisfactory with "Micronair Rotary Atomiser" sprayers. Swath width is governed by the design of the aircraft, its spray distribution system and its operation, and should be predetermined for each unit. Generally, the optimum swath width should not exceed the wing span of the aircraft, and is frequently less. Swaths must be measured accurately for flagging. Excessively wide or narrow swaths result in streaking and uneven distribution.

**GROUND SPRAYERS:** Standard low pressure herbicide sprayers equipped with flat fan or boom-jet nozzles are satisfactory. Use nozzles which deliver a medium-fine droplet in 15 to 40 gallons total spray per acre at 40 to 50 psi and at ground speeds not in excess of 3 to 4 m.p.h. Because of the contour levees in most rice fields, special care is needed to avoid skips and double spraying, and to avoid raising the boom too high so the spray fails to reach the weeds uniformly.

**OPERATION CONDITIONS:** Do not apply with aircraft when winds exceed 4 to 5 m.p.h. or with ground equipment with winds over 6 to 8 m.p.h. A cross-wind during spraying is desirable to equalize distribution. Fields may be treated when grass is either dry or wet with dew. Do not spray if rain threatens in 6 hours.

**DRIFT HAZARD TO OTHER CROPS:** PROPANILO-4 injures most crops except cereal grains and perennial grasses. Avoid drift or accidental application from turning aircraft on cotton, soybeans, corn, safflower, seedling legumes, vegetables, orchards, vineyards, gardens, shrubs, and ornamentals. Do not spray within ½ mile of sensitive crops downwind with either air or ground equipment when winds reach maximum recommended velocity for application. Do not spray within 50 feet with aircraft, or within 10 feet with ground equipment of sensitive crops on the upwind side. Once PROPANILO-4 is applied, it will not release fumes hazardous to nearby crops.

**RICE INJURY:** All leading commercial varieties are tolerant of PROPANILO-4. A yellowing or leaf treatment, but new growth is normal. Under and partial killing of rice may occur. Grow applying PROPANILO-4 during extremely in a weakened or sensitive condition from causes.

**EFFECT ON OTHER SPECIES:** Perennial nutgrass, Johnsongrass, knotgrass, longleaf well established roots, rhizomes, culms or PROPANILO-4 but usually recover. Several PROPANILO-4 but usually develop in rice stem. Sprangletop and red rice are not.

**LIMITATIONS AND TOLERANCES:**  
Crop Limitation  
Rice 56 days or before  
\*Recommended use does not result in rice

**CONTAINER DISPOSAL**

Do not reuse empty container. Wash the crush if possible, and discard in a safe place.

**NOTICE**

Riverside Chemical Company warrants the label description and is reasonably fit for the use in accordance with directions under this warranty nor any other warranty of similar purpose, express or implied, extends to label instructions, or under abnormal or reasonably foreseeable to Riverside Chemical risk of any such use.

EPA REG. NO. 9779-195



Feb 16, 1973

9779-195

Colors: IPI CF/349/03  
Black

# PROPANILO-4

CONTAINS FOUR POUNDS OF PROPANIL PER GALLON.  
USEFUL FOR THE CONTROL OF CERTAIN WEEDS IN RICE.

Use 4 to 4½ quarts PROPANILO-4 (4 to 4½ lbs. active) per acre for actively growing grass in 4 to 5 leaf and early tillering stage, or for stunted 1 to 4 leaf grass with deeper roots growing in dry soil.

Use 5 to 6 quarts PROPANILO-4 (5 to 6 lbs. active) per acre for tillering grass, 8 to 12 inches tall, only in emergency conditions. Only partial control may be expected.

DO AVOID RESIDUES AT HARVEST. DO NOT APPLY AFTER FULL TILLERING OF RICE OR WITHIN 56 DAYS BEFORE HARVEST. DO NOT EXCEED TOTAL OF 8 LBS. ACTIVE PER ACRE PER SEASON.

**METHOD OF SEEDING:** PROPANILO-4 may be used on dry planted (drilled or broadcast) or on muddy or clear water planted rice. For best results, fields should be uniformly level and have well prepared seedbeds free of large clods to encourage uniform and rapid emergence of rice, grass and weeds. Adequate inlets, drains and cross-levees should be provided to permit quick draining, flushing or flooding before and after treatment to meet the optimum water requirements for the rice crop and for optimum use of PROPANILO-4 in grass control.

#### WATER MANAGEMENT BEFORE TREATMENT:

**DRY PLANTING:** Plant in a moist seedbed, or flush to germinate the rice.

**MUDDY WATER PLANTING:** The planting flood is usually drained 1 to 3 days after seeding.

**SHALLOW WATER PLANTING:** Planting flood may be deep or shallow but is lowered as soon as the rice is "pegged". Maintain a shallow flood or intermittent flushing until the rice is well rooted. Avoid deep flooding from time of pegging until treatment; this encourages tall, spindly rice which may lodge in the mud after draining.

**ALL METHODS OF PLANTING. FLUSH THE FIELDS AS OFTEN AS NEEDED TO PREVENT DRYING AND SOIL CRUSTING AND TO AID THE EMERGENCE OF RICE AND GRASS. DURING PERIODS OF HIGH TEMPERATURE, DRYING WINDS AND LOW RAINFALL, IT IS ESPECIALLY IMPORTANT TO FLUSH OFTEN ENOUGH TO KEEP THE GRASS GROWING ACTIVELY AND THUS MORE SUSCEPTIBLE TO THE OPTIMUM DOSAGE OF PROPANILO-4. ALL OR MOST OF THE WATER SHOULD BE OFF THE FIELDS AT THE TIME OF SPRAYING TO ALLOW FULL COVERAGE OF THE GRASSES AND WEEDS.**

Treat grassy and weedy fields with PROPANILO-4 when a satisfactory stand of rice that tolerates flooding is established. Follow the recommendations according to the stage and condition of the growth of the grass as shown above under Timing and Dosage.

**WATER MANAGEMENT AFTER TREATMENT:** TREATED FIELDS SHOULD ALWAYS BE FLOODED BEFORE A SECOND INFESTATION OF GRASS HAS CHANCE TO DEVELOP BEYOND THE ONE-LEAF STAGE. Start flooding in 1 to 24 hours in warm, sunny weather if treatment has been made on actively growing grass in moist soil. During cool, cloudy weather or if treatment is made on slow growing grass in dry soil, delay flooding until 2 to 5 days afterwards to allow maximum time for kill. Cover the grass completely and maintain a flood at least 2 inches deep on the highest parts of the field even though the rice is submerged temporarily. As the rice grows above the water, deepen the flood accordingly. In general, rice can be grown with shallower flooding after PROPANILO-4 treatment than when water flooding after is used for grass control.

**FERTILIZER:** Fields to be treated with PROPANILO-4 may be fertilized before or at planting time. Place nitrogenous fertilizer 2 to 4 inches deep to minimize loss during periods when the fields are drained. Fertilizer may also be applied just before flooding. Apply nitrogen at any appropriate time. Do not use PROPANILO-4, fertilizer in combination application.

**APPLICATION EQUIPMENT:** Apply PROPANILO-4 with aircraft or ground sprayers. Carefully calibrate and adjust equipment to give medium-fine droplets, in a uniform pattern that provides complete coverage. Flush sprayers with clear water after each day's use. Clean all equipment used for PROPANILO-4 with a detergent rinse, followed by a clear water rinse, before and after spraying other materials or other crops such as cotton, soybeans, vegetables, fruits, etc. Applicators and flagmen should avoid contact with spray mist from PROPANILO-4 or any pesticides and should wear protective clothing and goggles. Wash thoroughly after exposure.

**AIRCRAFT:** Fixed wing or helicopter agricultural aircraft equipped with well designed spray distribution systems that produce a uniform medium-fine droplet spray may be used for PROPANILO-4. Gravity flow fertilizer sprayers or venturi-type spreader-seeders should not be used. Apply PROPANILO-4 in no less than 10 gallons total spray per acre with standard boom-nozzle or with "Swathmaster" sprayers. Somewhat higher gallonages are suggested for extra thick or tall grass. Five gallons per acre appear satisfactory with "Micronair Rotary Atomiser" sprayers. Swath width is governed by the design of the aircraft, its spray distribution system and its operation, and should be predetermined for each unit. Generally, the optimum swath width should not exceed the wing span of the aircraft, and is frequently less. Swaths must be measured accurately for flagging. Excessively wide or narrow swaths result in streaking and uneven distribution.

**GROUND SPRAYERS:** Standard low pressure herbicide sprayers equipped with flat fan or boom-jet nozzles are satisfactory. Use nozzles which deliver a medium-fine droplet in 15 to 40 gallons total spray per acre at 40 to 50 psi and at ground speeds not in excess of 3 to 4 m.p.h. Because of the contour levees in most rice fields, special care is needed to avoid skips and double spraying, and to avoid raising the boom too high so the spray fails to reach the weeds uniformly.

**OPERATION CONDITIONS:** Do not apply with aircraft when winds exceed 4 to 5 m.p.h. or with ground equipment with winds over 6 to 8 m.p.h. A cross-wind during spraying is desirable to equalize distribution. Fields may be treated when grass is either dry or wet with dew. Do not spray if rain threatens in 6 hours.

**DRIFT HAZARD TO OTHER CROPS:** PROPANILO-4 injures most crops except cereal grains and perennial grasses. Avoid drift or accidental application from turning aircraft on cotton, soybeans, corn, safflower, seedling legumes, vegetables, orchards, vineyards, gardens, shrubs, and ornamentals. Do not spray within ½ mile of sensitive crops downwind with either air or ground equipment when winds reach maximum recommended velocity for application. Do not spray within 50 feet with aircraft, or within 10 feet with ground equipment of sensitive crops on the upwind side. Once PROPANILO-4 is applied, it will not release fumes hazardous to nearby crops.

**RICE INJURY:** All leading commercial varieties of rice are exceptionally tolerant of PROPANILO-4. A yellowing or leaf burn of rice may be noted after treatment, but new growth is normal. Under some conditions, severe leaf burn and partial killing of rice may occur. Growers are warned to use caution when applying PROPANILO-4 during extremely hot weather or to rice that may be in a weakened or sensitive condition from over-watering, soil salts, or other causes.

**EFFECT ON OTHER SPECIES:** Perennial species such as cattail, bulrush, nutgrass, Johnsongrass, knotgrass, longtom, and others which develop from well established roots, rhizomes, corms or nuts may be temporarily injured by PROPANILO-4 but usually recover. Several aquatic species may be injured by PROPANILO-4 but usually develop in rice fields after the normal time of treatment for barnyardgrass. These include duck salad, Arrowhead lilies, red-stem, Sprangletop and red rice are not controlled with PROPANILO-4.

#### LIMITATIONS AND TOLERANCES:

Crop	Limitations	Tolerance
Rice	56 days or before tillering	None*

\*Recommended use does not result in residues at harvest.

#### CONTAINER DISPOSAL

Do not reuse empty container. Wash thoroughly with water and detergent, crush if possible, and discard in a safe place.

#### NOTICE

Riverside Chemical Company warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to Riverside Chemical Company, and buyer assumes the risk of any such use.

EPA REG. NO. 9779-125

NET CONTENTS



MANUFACTURED BY

**RIVERSIDE CHEMICAL CO.**

DIVISION OF COCA INDUSTRIES, INC. MEMPHIS, TENN. 38116

Riverside serves agriculture. Agriculture serves everyone.

Colors: IPI CF/349/03 (GREEN)  
BLACK