PM-25

Reg # 9779-340

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# Londax® Pro-Pack BnB

For post-emergence control of weeds in rice.

ACTIVE INGREDIENT	
Propanil (3,4-Dichloropropionanilide)	59.6%
Methyl 2-[[[[(4,6-dimethoxypyrimidin-2-yl)amino]-carbonyl]]	
aminojsulfonyljmethyljbenzoate	0.4%
INERT INGREDIENTS	40.0%
Total	100.0%

<sup>®</sup>Registered trademark of Dupont Agricultural Products

# **KEEP OUT OF REACH OF CHILDREN**

## DANGER/PELIGRO

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

## STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Call a physician.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Never give anything by mouth to an unconscious person.

## PRECAUTIONARY STATEMENTS DANGER HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes irreversible eye damage. Harmful or fatal if swallowed. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. This product may cause a skin sensitization reaction.

#### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and protective eyewear.

Discard clothing and 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, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

## USER SAFETY RECOMMENDATIONS

User should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing 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.

## Read Additional PRECAUTIONARY STATEMENTS.

EPA Reg. No. 9779-340

Manufactured For RIVERSIDE/TERRA CORPORATION P.O. Box 6000, Sioux City, Iowa 51102-6000 *Riverside Serves Agriculture. Agriculture Serves Everyone.*  ACCEPTED APR 10 1995 Under the Federal Insecticide. Fungicide, and Rodenticide Act. as amended, for the pesticide registered under EPA Reg. No. 9779-340 EPA Est. No.

NET CONTENTS 35.3 LBS.

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## ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. 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 contaminate water when disposing of equipment washwaters.

## 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 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 regulations.

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

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

Do not drain water from treated fields into areas where catfish farming is practiced.

Do not apply to fields where commercial crayfish farming is practiced and do not drain water from treated fields into areas where crayfish farming is practiced.

#### 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 as plants, soil, or water, is: coveralls, waterproof gloves, shoes plus socks and protective eyewear.

## STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL

## STORAGE

Store in a dry location away from children, animals, foods, feeds, seeds, or other agricultural chemicals. Handle in accordance with information given under PRECAUTIONARY STATEMENTS. In the event of spillage or leakage, scrape up material and dispose of in accordance with information given under DISPOSAL. Repackage and relabel useable product in a sound container. In case of fire or other emergency, report at once by toll-free telephone to 800-424-9300.

#### DISPOSAL

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Container Disposal: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT: Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

-	Do not apply or drain or flush equipment on or near desirable trees or other plants or in areas where their ro	oots
	may extend or in locations where the chemical may be washed or moved into contact with their roots.	
-	Do not use on lawns, walks, driveways, tennis courts, or similar areas.	

Prevent drift of spray to desirable plants.

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- Keep from contact with fertilizers, insecticides, fungicides, and seeds during storage.

Injury to or loss of subsequently sprayed crops may result from failure to observe the following procedures;

 Londax Pro-Pack BnB must be cleaned from application equipment prior to spraying crops other than rice, according to cleanup procedures described in the sprayer cleanup section of this label.

Injury to or loss of adjacent sensitive crops and vegetation may result from failure to observe the following:

Avoid all direct or indirect (such as spray drift) contact with crops other than rice or land scheduled to be planted with crops other than rice because most crops other than rice are highly sensitive to Londax Pro-Pack BnB.

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### **GENERAL INFORMATION**

Londax Pro-Pack BnB is a post-emergence herbicide for the control of many grasses and broadleaf weeds in rice. It may be applied by either ground or aerial spray equipment after dilution and thorough agitation with water. Thorough spray coverage of weeds is necessary for best results. Londax Pro-Pack BnB is a unit package product. When using this product the entire contents of the bag must go into the spray tank. Failure to use the entire contents of the bag could result in reduced weed control.

Londax Pro-Pack BnB should be applied when weeds and grasses are small. Use only on rice fields which have been drained of flood water. Fields to be treated should be inspected frequently before the application of Londax Pro-Pack BnB to insure that grass and weeds are at the proper stage of growth (1 to 3 leaf stage with an occasional 4 leaf plant). The degree and duration of control may depend on the following:

- use rate
- weed spectrum and infestation intensity
- weed size at application
- growing conditions at and following treatment
- soil pH, texture and organic matter content
- water management

ATTENTION: Never apply Londax Pro-Pack BnB except as recommended on this label because use in any other way may result in damage or injury to persons, animals, or crops, or other unintended consequences.

Before applying Londax Pro-Pack BnB, make sure the spray equipment is properly calibrated to avoid over- or under-treatment.

## ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

The herbicidal action of Londax Pro-Pack BnB may be influenced by temperature. At warmer temperatures, expression of herbicide symptoms is accelerated; at cooler temperatures (when air or water temperatures are below 70°F), expression of herbicide symptoms may be delayed beyond 7 days.

Occasionally, treated rice may suffer temporary chlorosis and/or growth retardation after treatment with Londax Pro-Pack BnB. These symptoms, which intensity in cold water and at high ambient temperatures, are normally temporary and disappear within 2 to 3 weeks after application.

Do not apply Londax Pro-Pack BnB under windy conditions which will allow drift to adjacent susceptible crops such as beans, soybeans, cotton, safflower, cucurbits, vegetables, orchards, and other sensitive crops. Wind velocity greater than 5 miles per hour will often cause applications to be streaked and give less than maximum herbicidal control.

## USE RESTRICTIONS

To avoid excessive residues at harvest, do not apply after the end of tillering for the rice variety being treated. Do not apply more than a maximum of 4.5 pounds active ingredient per acre in a single application or exceed 8.0625 lbs, a.i. Londax Pro-Pack BnB per acre per season. Do not apply Londax Pro-Pack BnB within fourteen days before or after insecticide applications because serious damage to rice may occur. Do not use on wild rice (Zizania spp.). Do not graze treated fields or feed treated forage within 80 days of last application. Do not rotate to crops other than rice for 120 days following application.

#### WEEDS CONTROLLED

Common Name	Scientific Name	Common Name	Scientific Name
Barnyardgrass (watergrass)*	Echinochloa crusgaili or	Hoorahgrass	Fimbristylis miliaceae
	Echinochioa colonum	Mexicanweed	Caperonia castanaefolia
Brachiaria	Brachiaria spp.	Northern jointvetch	Aeschynomene virginica
Cocklebur	Xanthium spinosum	(curly indigo)	1
Crabgrass, large	Digitaria sanguinalis	Paragrass	Panicum pupurascens
Croton, wooly	Croton capitatus	Pensylvania smartweed	Polygonum pensylvanicum
Curty Dock	Rumex crispus	Pigweed, redroot	Amaranthus retroflexus
Eclipta	Eclipta alba	Redstem*	Ammannia auriculata
Foxtail	Setaria spp.	Redweed	Melochia corchorifolia
Goosegrass	Eleusine indica	Rice flatsedge	Cyperus Iria
Gooseweed	Sphenoclea zeylanica	Spearhead	Rhynchospora cornicula.a
Gulf cockspur	Echinochloa crus-pavonis	Texas Millet	Panicum texanum
Hemp sesbania	Sesbania exaltata	(Texas panicum)	
(coffee bean)		Texasweed	Caperonia palustris
Morningglory (annual)		Wiregrass (Spikerush)	Eleocharis spp.
Entireleaf	Ipomea hederacca'	Yellow nutsedge	Cyperus esculentus
lvyleaf	Ipomea hederaces	-	
Palmleaf	Ipomea wrightii		
Pitted	Ipomea lacunosa		· · · · · ·

intergriuscula variety

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\* Naturally occurring resistant biotypes of these weeds are known to exist. Londax Pro-Pack BnB will not control these resistant biotypes. Tank mixtures with alternate chemistry are recommended where these biotypes are known or suspected to be present. When tank mixing, always read all individual labels and observe all label directions before using. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

Rice fields should be well prepared and free of large clods to obtain uniform germination of grasses and weeds, and insure uniform flood levels. If necessary, fields may be flushed prior to treatment to produce uniform grass germination. If fields are flushed prior to treatment, flush in sufficient time so that grass and rice are growing vigorously at time of treatment. Water should be drained from fields before spraying so that grasses and weeds are fully exposed to the spray.

Londax Pro-Pack BnB acts primarily on grasses and weeds which have already germinated. (Maximum activity usually is not apparent until 5 to 7 days after application.) To prevent more weeds from germinating after treatment, fields should be flooded within 24 hours after spraying, or as soon as possible after 24 hours. Flooding after spraying will improve the grass control after Londax Pro-Pack BnB treatment. In cases where flooding of the field would not be complete within 24-48 hours or less after application of Londax Pro-Pack BnB, it is best to treat a portion of the field, flood that treated portion, and then treat the remainder. This will help prevent reinfestation of weeds and grasses.

### RATES

Single Treatment: Use one bag (35.3 lbs.) for every 5 acres of rice. This will be 4.3 lbs. of active ingredient per acre.

Sequential Applications: For best results in controlling grasses, broadleaf weeds and sedges, make sequential applications of Londax Pro-Pack BnB. Make a first application of 5.3 to 7.1 lbs. (3.2 to 4.23 lbs. a.i.) per acre when grasses, broadleaf weeds and sedges are in the 1 to early 4 leaf stage and actively growing. Make the second application just prior to establishment of the permanent flood. As in the first application, all weeds should be in the 1 to early 4 leaf stage. Fields should be flooded within 24-48 hours after second treatment. Do not exceed 8,0625 lbs. a.i. per acre per season of Londax Pro-Pack BnB.

Important: Londax Pro-Pack BnB is a unit package product. When using Londax Pro-Pack BnB the entire contents of the bag must go into the spray tank. When using the lower rate of 5.3 pounds per acre the unit package will treat 6.6 acres. Allow for this in the treatment calculations so that the entire contents of the bag will be used. Failure to use the entire contents of the bag could result in reduced weed control.

Avoid treatment if rain threatens within 8 hours or if high winds may cause uneven application or drift.

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

The grower should inspect fields frequently to determine proper time of application. The ideal application time is when most barnyardgrass has one to three leaves, with only an occasional plant having four leaves. During drought conditions grasses may reach the three leaf stage while still quite short or stunted, so special attention to stage of growth is necessary in these situations to avoid grasses becoming too mature for best results.

Spray Preparation and Gallonage (Aeria) or Ground Applied): Thoroughly mix Londax Pro-Pack BnB with clean water before adding any other material (i.e., tank mix partner and drift agent). To ensure tank mix compatibility, test the desired mixture prior to use.

To ensure uniform mixing and application, agitate the mixture before application. If the mixture is not sprayed immediately after agitation, reagitate it before application. Always apply Londax Pro-Pack BnB spray preparations within 24 hours of product mixing, or the product may degrade. The use of a nonionic surfactant (minimum 80% active ingredient) at 0.25% v/v (1 qt. per 100 gals.), or a crop oil concentrate at 1% v/v (1 gal. per 100 gals.) is recommended.

For AERIAL APPLICATION, dilute the proper amount of Londax Pro-Pack BnB with 10 to 12 gallons of water per acre. If humidities are low, increase to 12 to 15 gallons of water per acre. For GROUND EQUIPMENT dilute the proper amount of Londax Pro-Pack BnB with 15 to 25 gallons of water per acre. Lesser amounts of water often give inadequate coverage and may cause poor results.

Water Management: For the best weed control, establish the permanent flood as soon as possible (within 24-48 hours of application) after the last application of Londax Pro-Pack BnB combinations. If flushing is necessary prior to establishment of the permanent flood, apply Londax Pro-Pack BnB combinations after the flush but prior to the establishment of the permanent flood.

Loss of the permanent flood following applications of Londax Pro-Pack BnB combinations may result in poor performance due to regrowth of treated plants or reinfestation by newly germinated weeds.

Runoff caused by rainfall, overflow, levee breach, seepage, or introduction of new water soon after treatment may reduce product performance.

NOTE: When Londax Pro-Pack BnB is applied, especially after the fourth leaf stage of growth of the rice, under some conditions, visible leaf injury on rice may result. However, the rice plants quickly outgrow such injury when caused by the later applications.

Spray Tank Preparation: Spray equipment must be clean and free of deposits before using Londax Pro-Pack BnB. Deposits in spray equipment can trap Londax Pro-Pack BnB and inhibit cleanup of the spray equipment after use. Therefore, before spraying Londax Pro-Pack BnB, clean the equipment according to the cleanup procedures specified on the label of the product previously sprayed.

Spray Mixture Preparation: Thoroughly mix Londax Pro-Pack BnB with clean water (water that is free of sediment and agricultural chemicals) in the spray tank. Do not use water from paddies. Only approved drift control agents; e.g., Riverside Windbrake<sup>14</sup>, may be used with Londax Pro-Pack BnB. Do not use any other additives except as directed by this label.

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

Mixing and application equipment exposed to Londax Pro-Pack BnB 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.

## SPRAYER CLEANUP

Before using equipment exposed to Londax Pro-Pack BnB 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 nonchlorine-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 Riverside TC at 32 oz. per 100 gals, 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 Riverside TC.
- 5. Fill the tank one-half full with clean water and add 1 gal, of 21% ammonia or 7 gals, of 3% ammonia per 100 gals, 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.
- Rinse tanks, booms, and hoses to remove all traces of ammonia.
- 10. Dispose of the rinsate on site or at an approved waste disposal facility.

Note: When applying multiple loads of Londax Pro-Pack BnB 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.

CAUTION: 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, 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 Londax Pro-Pack BnB.

#### SPRAY DRIFT MANAGEMENT

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

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

Importance of Droplet Size: The most effective way to reduce drift potential is to apply large droplets (> 150-200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See "Wind," "Temperature and Humidity," and "Temperature Inversions" sections of this label.

#### **Controlling Droplet Size - General Techniques**

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

<u>Pressure</u> - 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 A HIGHER CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.

Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce target droplets. Consider using low-drift nozzles.

#### Controlling Droplet Size - Aircraft

<u>Number of Nozzles</u> - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage. <u>Nozzle Orientation</u> - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.

Nozzle Type - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.

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Boom Length - The boom length should not exceed 3/4 of the wing or rotor length-longer booms increase drift potential. <u>Application Height</u> - Application more than 10 ft, above the canopy increases the potential for spray drift.

## BOOM HEIGHT

Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID GUSTY OR WINDLESS CONDITIONS.

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 hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. 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 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.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

#### AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperty, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured property, and that drift is not occurring.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the spray equipment section of this label to determine if use of an air assist sprayer is recommended.

NOTICE: Seller 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 not reasonably foreseeable to Seller, and Buyer assumes the risk of any such use.