

# DuPont™ Londax® DF® herbicide

## Technical Information

### Active Constituent:

600 g/kg BENSULFURON PRESENT AS THE METHYL ESTER

### Pack Sizes:

500 g



## READ SAFETY DIRECTIONS BEFORE OPENING OR USING

For the control of Arrowhead, Dirty dora and Star fruit and suppression of Cumbungi and Common spike rush in aerially sown rice as per Directions for Use.

### SAFETY DIRECTIONS

Product will irritate the eyes. **DO NOT** inhale dust. When preparing spray and using the prepared spray wear goggles. If product in eyes, wash it out immediately with water. Wash hands after use. After each days use wash goggles.

### FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

### MATERIAL SAFETY DATA SHEET

For further information refer to the Material Safety Data Sheet.

## GENERAL INSTRUCTIONS

Under muddy/turbid water situations or where treatment is delayed beyond the recommended weed stage, or where weeds are not actively growing, or where Starfruit are present in very high populations (i.e. Western Murray Valley) results may be slow to appear and weeds may be only stunted or suppressed.

**Proper water management is essential** for maximum weed control with DuPont™ Londax® DF®. Ensure adequate water depth in the bays is achieved at least 1 full day before application. Water movement to and within bays should cease one full day prior to application. No additional water is to be added or drained from treated bays for a **minimum of 5 days** after application. If cold conditions are experienced after application, **HOLD** the water as long as possible and introduce fresh water slowly. Water levels can then be restored to depths consistent with normal rice growing requirements.

**DO NOT** allow tailwater drainage from the paddy for 5 days following treatment with DuPont Londax® DF®.

Crops other than rice may be extremely sensitive to low concentrations of DuPont™ Londax® DF® residues in the sprayer. See "Sprayer Clean-up" section.

DuPont™ Londax® DF® can be applied early to late post-emergence (2 leaf - mid tillering) of the crop with adequate crop safety. However, applications made to weeds prior to the 3 leaf growth stage give best weed control and optimise crop yield potential.

### RESISTANT WEEDS WARNING

DuPont™ Londax® DF® herbicide is a member of the sulfonyleurea group of herbicides. The product has the ALS inhibitor mode of action. For weed resistance management, the product is a Group B herbicide.



Some naturally-occurring weed biotypes resistant to the product and other Group B herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by this product or other Group B herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Du Pont (Australia) Limited accepts no liability for any losses that may result from the failure of this product to control resistant weeds.

Strategies to minimise the risk of herbicide resistance are available. Consult your farm chemical supplier, consultants, local Department of Agriculture or Primary Industries, or local DuPont representative.

### CROP SAFETY

**DO NOT** apply to crops that are stressed by any cause (such as severe weather conditions, excessive soil acidity or alkalinity, poor nutrient status, disease or insect damage) as crop injury may result. When treatment is followed by severe stress crop yellowing or growth retardation may occur. Crops normally recover without loss in yield.

After treatment with DuPont™ Londax® DF® transient root growth inhibition and associated lodging of the seedling may occur, however the rice plant should quickly recover and will suffer no permanent check to its development.

### SPRAY PREPARATION

DuPont™ Londax® DF® is a dry flowable formulation which can be applied either by conventional wet application equipment or by Du Pont certified direct dry application (DDA) equipment.

### Conventional Spray Application (Ground or Aerial)

Partially fill the spray tank with water. Measure the amount of DuPont™ Londax® DF® required for the area to be sprayed. Add the correct amount of DuPont™ Londax® DF® to the spray tank with the agitation system engaged. Top up to the correct volume of water. The material must be kept in suspension at all times by continuous agitation. The use of a surfactant/wetting agent is not necessary.

### SCWIIRT Equipment

Mix the required amount of DuPont™ Londax® in water (total volume of 5 to 10 L/ha). The material must be kept in suspension at all times by continuous agitation. The use of a surfactant/wetting agent is not necessary.

### Direct Dry Application (DDA)

Add DuPont™ Londax® DF® direct to the direct dry application hopper.

### APPLICATION INSTRUCTIONS

Avoid spraying in still conditions and in winds likely to cause drift. Turn off application equipment whilst passing over irrigation channels, creeks and dams.

### Conventional Spray Application

Apply by air in a minimum of 20 L/ha water to flooded bays. Application using equipment set to produce coarse droplets will increase direct application onto the water surface and minimise contact with emerged crop or weed foliage.

**DO NOT** use ground or aerial SCWIIRT methods (including a Bickley boom) if excess rice and weed vegetation will impede redistribution of DuPont™ Londax® DF® in water resulting in inadequate control.

### Aerial application

DuPont™ Londax® DF® can be applied either by a fixed wing aircraft or by a helicopter (also refer to section on SCWIIRT application to permanent water). Apply either by a blanket spray (minimum of 20 L/ha water) or SCWIIRT technique (minimum of 10 L/ha water). Apply by air to the flooded paddy when rice has reached 2 leaf or later stage.

For blanket spraying the aircraft or helicopter boom should be fitted with multiple nozzles adjusted to give a relatively coarse droplet size e.g. CP solid stream nozzle that will increase direct application onto the water surface and minimise contact with emerged crop or weed foliage.

For a fixed wing SCWIIRT application a Bickley boom that conforms to the following specifications is recommended.

- Two nozzles mounted on droppers, one either side with droppers positioned just outside the first boom hanger (28 - 35% of wingspan)
- Dropper length approximately 40 - 60 cm or lower below the trailing edge of the wing
- Solid stream nozzles with bore sufficient to apply desired volume at a pressure of 240 to 310 kPa (35 to 45 psi)
- Check valves (Spraying Systems diaphragm type 12328, ¾ inch) located behind nozzles to eliminate "trailing" after shut off.
- Spray at a wheel height of 2 m above the field surface.
- Swath widths of approximately 25 m are recommended.

**DO NOT** use a Bickley boom when applying to permanent water where excess rice and weed vegetation could impede the redistribution of Londax in water resulting in unsatisfactory control of aquatic weeds.

### SCWIIRT application to permanent water

Apply by tractor, 4 wheel agricultural motorbike or Helicopter. Apply to flooded bay at a distance of 20 to 30 m between runs. Position dripper nozzles no more than 50 cm from the water surface and maintain pressure at or below 200 kPa (30 psi or 2 bar).

### Ground application (Conventional Spray boom)

Apply in a minimum of 40 L/ha water to flooded bays.

### Direct Dry Application (DDA)

DuPont™ Londax® DF® may only be applied direct dry by air using only DuPont certified equipment.

Before applying DuPont™ Londax® DF® direct dry by air, calibrate equipment as described by the equipment manufacturer.

**DO NOT** mix DuPont™ Londax® DF® to be applied direct dry by air with any liquid carrier (such as water or oil) and **DO NOT** mix with any surfactant or crop oil.

Simultaneous applications of DuPont™ Londax® DF® via DDA and spray application of other compatible pesticides are permissible.

### SPRAYER CLEANUP

#### Spray Application Equipment

To avoid subsequent injury to crops other than rice, immediately after spraying thoroughly remove all traces of DuPont™ Londax® DF® from mixing and spray equipment as follows:

1. Drain tank, then flush tank, filters, boom and hoses with clean water for a minimum of 10 minutes.
2. Fill the tank with clean water then add 300 mL household chlorine bleach (containing 4 % chlorine) per 100 L of water. Flush through boom, filters, and hoses then allow to stand for 15 minutes with agitation engaged, then drain.
3. Repeat step 2.
4. Nozzles and screens should be removed and cleaned separately. To remove traces of chlorine bleach, rinse the tank thoroughly with clean water and flush through hoses and boom.

#### Direct Dry Application (DDA) Equipment

Follow equipment cleanup instructions provided by equipment manufacturer.

### COMPATIBILITIES

DuPont™ Londax® DF® is compatible with the herbicides; molinate (eg Ordram®) and thiobencarb (eg Saturn® EC) and the insecticides chlorpyrifos (eg Lorsban® 500), diazinon (eg Gesapon® 800) and trichlorphon (eg Dipterex® 500SL).

### PROTECTION OF CROP, NATIVE AND OTHER NON-TARGET PLANTS

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

**DO NOT** apply irrigation tailwaters to crops other than rice.

**DO NOT** apply or drain or flush equipment on or near desirable trees or other plants or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.

**DO NOT** apply or allow spray to drift onto adjacent crops and non-target desirable plants, or onto agricultural land scheduled to be planted to other crops as injury to the crop may occur.

**DO NOT** sow DuPont™ Londax® DF® treated paddies to any other crop for four months following DuPont™ Londax® DF® application, as crop injury may result.

**PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

**DO NOT** contaminate any body of water by spraying (other than rice fields), cleaning of equipment or disposal of waste.

**STORAGE AND DISPOSAL**

**KEEP OUT OF REACH OF CHILDREN**

Store in the closed, original container in a dry, well-ventilated area, as cool as possible out of direct sunlight. Store in a locked room or place away from children, animals, food, foodstuffs, seed and fertilisers.

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. **DO NOT** dispose of undiluted chemical on site. If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling break, crush or puncture and bury empty containers in a local authority landfill. If not available bury the container below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should **NOT** be burnt.

**IN A MEDICAL EMERGENCY CALL  
1800 674 415 All hours**

**NOTICE TO BUYER**

To the extent permitted by law all conditions and warranties and statutory or other rights of action which buyer or any other user may have against Du Pont or Seller are hereby excluded. Du Pont hereby gives notice to buyer and other users that it will not accept responsibility for any indirect or consequential loss arising from reliance on product information or advice provided by Du Pont or on its behalf unless it is established that such information or advice was provided negligently and that the product has been used strictly as directed. Du Pont's liability shall in all circumstances be limited to replacement of the product or a refund of the purchase price paid therefor.

APVMA Approval Number: 40748/0507

**DIRECTIONS FOR USE**

**RESTRAINTS**

**DO NOT** store a suspension of DuPont™ Londax® DF® herbicide for more than 2 days otherwise significant breakdown may occur.

**DO NOT** apply to crops under stress (Refer to Crop Safety Section for details).

**DO NOT** store tankmixes of DuPont™ Londax® DF® herbicide.

CROP	WEEDS CONTROLLED	STATE	RATE g/ha	CRITICAL COMMENTS
Rice	Arrowhead <i>(Sagittaria montevidensis)</i> Dirty dora <i>(Cyperus difformis)</i> Star fruit <i>(Damasonium minus)</i>	NSW and Vic Only	50 to 85	For best results apply early post crop emergence when weeds are small, up to 3 leaf stage.
	Cumbungi <i>(Typha spp.)</i> Suppression only Common spikerush <i>(Eleocharis acuta)</i> Suppression only			Apply by air to flooded paddy when rice has reached 2 leaf or later stage. Use the higher rate where paddy water is muddy/turbid or weeds are larger.  In the top bays for more reliable weed control use the maximum label rate.  Pre-emergence suppression only. Will not suppress established plants or regrowth from rhizomes

**NOT TO BE USED FOR ANY OTHER PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.**

The information set forth herein is furnished free of charge and is based on technical data that DuPont believes to be reliable. It is intended for use by persons having technical skill at their own discretion and risk. DuPont makes no warranties, expressed or implied, and assumes no liability in connection with any of this information. Nothing herein is to be taken as license to operate under or a recommendation to infringe on any patents.

Copyright © 2008 E.I. du Pont de Nemours and Company. All rights reserved.

The DuPont Oval Logo, The miracles of science®, DuPont™, DF®, and Londax® are trademarks or registered trademarks of DuPont or its affiliates.

\* Non DuPont Trademark

Du Pont (Australia) Limited  
7 Eden Park Drive,  
Maquarie Park NSW 2113  
Phone: (02) 9923 6111 or 1800 257 169  
<http://www.au.ag.dupont.com>