### **READ SAFETY DIRECTIONS BEFORE OPENING OR USING**

# Escalate<sup>®</sup> UltraMax

### **Cotton Defoliant**

ACTIVE CONSTITUENTS:

## 240 g/L THIDIAZURON 120 g/L DIURON

For the defoliation of Cotton prior to harvest



ADAMA



adama.com

CONTENTS: 1 - 20 L

### DIRECTIONS FOR USE (For use in Qld, NSW, WA only)

**Restraints:** D0 NOT apply ESCALATE<sup>®</sup> ULTRAMAX following application of sodium chlorate, magnesium chlorate or diquat. D0 NOT apply if greater than 50 mm rainfall is expected within 3 days of application.

DO NOT apply when there are aquatic and wetland areas including aquacultural ponds or surface streams downwind from the application area; or non-target terrestrial vegetation downwind from the application area; and within the mandatory no-spray zone shown below.

Diuron use with FINE spray droplet size classification (ASAE S572 defined	nition)			
FOR AERIAL APPLICATION – TERRESTRIAL VEGETATION PROTECTION				
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA			
	FIXED WING AIRCRAFT	HELICOPTER		
3 - 8 kilometres per hour	250 metres 180 metres			
9 - 14 kilometres per hour	350 metres	300 metres		
15 - 20 kilometres per hour	450 metres	300 metres		
FOR GROUND APPLICATION				
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA			
3 - 20 kilometres per hour	15 metres			
FOR AERIAL APPLICATION – AQUATIC PROTECTION				
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA			
	FIXED WING AIRCRAFT	HELICOPTER		
3 - 8 kilometres per hour	120 metres	100 metres		
9 - 14 kilometres per hour	160 metres	120 metres		
15 - 20 kilometres per hour	160 metres	120 metres		
FOR GROUND APPLICATION				
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA			
3 - 20 kilometres per hour	10 metres			



	APPLICATION – TERRESTRIAL VEGETATION PR D RANGE AT TIME OF APPLICATION	UIEGHUN		DOWNWIND	) RISK AREA	
			FIXED WIN	IG AIRCRAFT	HELICOPTER	
3 - 8 kilometres per hour			60 metres		60 metres	
9 - 14 kilometres per hour			80 metres		60 metres	
15 - 20 kilometres per hour			80 metres		60 metres	
OR GROUN	D APPLICATION					
	) RANGE AT TIME OF APPLICATION			DOWNWIND	) RISK AREA	
	tres per hour			5 me	tres	
	APPLICATION – AQUATIC PROTECTION					
WIND SPEED RANGE AT TIME OF APPLICATION			DOWNWINE FIXED WING AIRCRAFT			
2. 9 kilomatros par haur			20 metres		HELICOPTER 20 metres	
3 - 8 kilometres per hour 3 - 14 kilometres per hour			40 metres		40 metres	
5 - 20 kilometres per hour 15 - 20 kilometres per hour			40 metres		40 metres	
	DAPPLICATION				10 1100	
/IND SPEED	RANGE AT TIME OF APPLICATION			DOWNWIND	) RISK AREA	
- 20 kilomet	tres per hour		5 metres			
iuron use v	vith COARSE spray droplet size classification (A	ASAF S572 d	efinition)			
	APPLICATION – TERRESTRIAL VEGETATION PR		omneromy			
/IND SPEED RANGE AT TIME OF APPLICATION			DOWNWIND RISK AREA			
			FIXED WING AIRCRAFT		HELICOPTER	
	es per hour		20 metres		20 metres	
	tres per hour			netres	40 metres	
	etres per hour		40 r	netres	40 metres	
	DAPPLICATION		1			
	D RANGE AT TIME OF APPLICATION			DOWNWINE		
	tres per hour APPLICATION – AQUATIC PROTECTION		<u> </u>	5 me	etres	
	D RANGE AT TIME OF APPLICATION		[	DOWNWIND	D BISK ABEA	
WIND SPEED RANGE AT TIME OF AFFLICATION			FIXED WING AIRCRAFT		HELICOPTER	
- 8 kilometr	es per hour		20 metres		20 metres	
9 - 14 kilometres per hour			20 metres		20 metres	
15 - 20 kilometres per hour			20 metres		40 metres	
OR GROUN	D APPLICATION					
	O RANGE AT TIME OF APPLICATION			DOWNWINE	) RISK AREA	
- 20 kilomet	tres per hour			5 me	tres	
ROP/	DEFOLIATION CONDITIONS	RATE/ha		CRITICAL COMMENTS		
Defoliation – first or second spray	Ideal Conditions are hot to warm (30 - 35°C daytime temperature) and the crop is ready to be defoliated with natural senescence already occurring. Nitrogen and water are almost depleted and there is little or no top growth. A good fruit load is set.			<ul> <li>Apply the first spray to cotton, which has been grown under good (non-stressed) conditions and is physiologically mature ie., when the top harvestable boll is mature. Application made prior to boll maturit may result in yield and quality reductions.</li> <li>Use the higher rate for denser canopies or to provide a faster response.</li> <li>A second spray of either ESCALATE<sup>®</sup> ULTRAMAX or an alternative harvest aid may be required 7 - 10 days later.</li> </ul>		
	<b>Good</b> Conditions are warm (25 - 30°C daytime temperature) and the crop is ready to be defoliated. Nitrogen and water are low and there is little or no new growth and a good fruit load is set.	100 - 125 mL plus the label rate indicated of D-C-Tron <sup>†</sup> Cotton Spray Oil or Canopy <sup>†</sup> or Hasten <sup>†</sup> Spray Adjuvant		Apply as above, but use these rates under good conditions.		
	Average Conditions are; (i) warm but night temperatures are dropping to 12°C (not below) and the crop is physiologically ready to defoliate or; (ii) temperature is still hot/warm but the crop is not physiologically ready to senescence.	125 - 150 mL plus the label rate indicated of D-C-Tron <sup>†</sup> Cotton Spray Oil or Canopy <sup>†</sup> or Hasten <sup>†</sup> Spray Adjuvant		Apply as above, but use these rates under average conditions.		
	<b>Cold</b> Night temperatures fall below 12°C and/or mean day/night temperatures fall below 18°C.	150 - 200 mL plus the label rate indicated of D-C-Tron <sup>†</sup> Cotton Spray Oil or Canopy <sup>†</sup> or Hasten <sup>†</sup> Spray Adjuvant		Apply as above, but use these rates under cold conditions.		

COTTON PROCESSING: NOT REQUIRED WHEN USED AS DIRECTED. GRAZING/COTTON TRASH: DO NOT GRAZE TREATED AREAS OR FEED COTTON TRASH TO LIVESTOCK.



#### **EXPORT OF TREATED PRODUCE**

Growers should note that suitable MRLs or important tolerances may not be established in all markets for produce treated with ESCALATE® ULTRAMAX. If you are growing produce for export, please check with Adama Australia for the latest information on MRLs and import tolerances BEFORE using ESCALATE® ULTRAMAX.

#### **GENERAL INSTRUCTIONS**

ESCALATE® ULTRAMAX is a liquid suspension formulation and should be shaken well before use. After treatment with ESCALATE® ULTRAMAX, leaves fall while still green so that there is minimal dry leaf trash to contaminate fibre or interfere with harvesting. Maximum defoliation occurs 7 - 21 days following application of ESCALATE® ULTRAMAX.

Defoliation will be slower under cold conditions, or when the crop is not physiologically mature.

NOTE: Rainfall within 24 hours after application will reduce the effectiveness of ESCALATE® ULTRAMAX; retreatment may be necessary. Crops with moderate to high levels of nitrogen remaining in the soil are more prone to leaf freezing than crops that have depleted soil nitrogen.

#### MIXING

Add the required amount of ESCALATE® ULTRAMAX straight into the partly filled spray tank or mixing vat with agitator running, followed by D-CTron<sup>†</sup> Cotton Spray Oil or Canopy<sup>†</sup> or Hasten<sup>†</sup> Spray Adjuvant, then add the rest of the water. Keep mixture agitated while spraying. Use only freshly prepared sprays.

#### DO NOT store spray mixture overnight.

When tank mixing with emulsifiable concentrates (EC), add the ESCALATE® ULTRAMAX to the 3/4 filled spray tank or mixing vat and agitate thoroughly. With agitator running, then add the EC product, followed by the D-C-Tron<sup>†</sup> Cotton Spray Oil or Canopy<sup>†</sup> or Hasten<sup>†</sup> Spray Adjuvant.

Keep mixture agitated while spraying.

#### APPLICATION

Apply as a uniform spray ensuring thorough coverage of the whole plant.

#### EQUIPMENT

Aircraft: Apply by aircraft in 20 - 40 L/ha spray mixture and ensure thorough coverage. A steady cross wind is recommended for best penetration. DO NOT exaggerate swath width.

Ground Sprayers: Standard boom sprays are recommended and must be fitted with mechanical or by-pass agitation. Use sufficient water to obtain complete coverage of all leaves, ie at least 90 - 100 litres of water per hectare. Good coverage should be obtained with three or more nozzles per row depending upon crop height and canopy density. A nozzle configuration including droppers will give maximum coverage in dryland crops with particular care being taken to ensure thorough but even coverage. Overdosing on some plant parts e.g., caused by nozzle overlap along the sides of plants may result in localised leaf freezing. If band spraying dryland crops, care should be taken when calculating the actual applied rate of ESCALATE® ULTRAMAX per sprayed hectare.

**IMPORTANT NOTES ON CLEANING EQUIPMENT** Tank mixes of ESCALATE® ULTRAMAX with organophosphates may form a residue in application equipment. While still fresh and moist, this residue is easily removed by flushing the entire system with a commercial tank cleaner.

DO NOT allow the spray solution to dry in the application equipment. Immediately following application, flush and rinse equipment (mix tanks, pumps, transfer lines, application tanks, sumps, booms, nozzles and all related equipment) thoroughly with detergent and water. Should any residue of ESCALATE® ULTRAMAX remain in the sprayer system, it may be released during subsequent applications of other products causing damage to crops.

#### COMPATIBILITY

ESCALATE® ULTRAMAX is compatible in tank mixtures with ethephon and dimethoate.

**CAUTION:** When tank mixed with Wipe-Out 450<sup>®</sup> (glyphosate), a higher proportion of cotton leaf may be retained (freezing) when used on conventional, Bollgard<sup>†</sup> II and Liberty Link<sup>†</sup> cotton. DO NOT use this mixture on stressed cotton, particularly drought affected cotton. This applies in the case of conventional and genetically-engineered cotton varieties, including Bollgard<sup>†</sup> II, Liberty Link<sup>†</sup> and Roundup Ready<sup>†</sup> cotton varieties.

#### PROTECTION OF CROPS. NATIVE AND OTHER NON-TARGET PLANTS

DO NOT allow spray drift to contact trees or crops other than cotton, as this product may injure or defoliate other crops, particularly citrus, grapevines and lettuce.

- To help reduce drift damage potential: DO NOT apply ESCALATE® ULTRAMAX by air when citrus in flush is within 8 km downwind from the point of application.
- DO NOT apply ESCALATE® ULTRAMAX by air when within 800 m of lettuce.

#### In addition:

- D0 NOT plant lettuce or carrots in cotton fields where ESCALATE<sup>®</sup> ULTRAMAX has been applied within the previous 9 months.
- DO NOT plant legumes, lucerne, other root crops or leafy vegetables (besides those noted above) in cotton fields where ESCALATE® ULTRAMAX has been applied within the previous 2 months.
- DO NOT plant small grains, sorghum or corn in cotton fields where ESCALATE® ULTRAMAX has been applied within the previous 2 weeks.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

#### **STORAGE AND DISPOSAL**

KEEP OUT OF REACH OF CHILDREN. Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. DO NOT store the product at low temperatures (less than 5°C). Triple rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or a designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

#### SAFETY DIRECTIONS

Will irritate the eves and skin. Avoid contact with eves and skin. When opening the container, preparing the spray, and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow-length PVC gloves. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

#### **FIRST AID**

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

#### SDS

Additional information is listed in the safety data sheet (SDS). A safety data sheet for ESCALATE® ULTRAMAX is available from adama.com or call Customer Service on 1800 423 262.

CONDITIONS OF SALE: The use of ESCALATE® ULTRAMAX Cotton Defoliant being beyond the control of the manufacturer, no warranty expressed or implied is given by Adama Australia regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Adama Australia accepts no responsibility for any consequence whatsoever resulting from the use of this product.

<sup>®</sup> Registered trademark of an Adama Group Company <sup>†</sup> Other trademarks

NOT A DANGEROUS GOOD ACCORDING TO THE AUSTRALIAN DANGEROUS GOODS (ADG) CODE.

08/2017 9262