

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Escalate® Ultra Cotton Defoliant



ADAMA
ESSENTIALS

ACTIVE CONSTITUENTS: 120 g/L THIDIAZURON
60 g/L DIURON

*For the defoliation of Cotton
prior to harvest.*

adama.com

CONTENTS: 5 L, 20 L

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

Restrains: DO NOT apply ESCALATE Ultra following application of sodium chlorate, magnesium chlorate or diquat.
DO NOT apply if greater than 50 mm rain fall 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 definition)		
FOR AERIAL APPLICATION – TERRESTRIAL VEGETATION PROTECTION		
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA	
	FIXED WING AIRCRAFT	HELICOPTER
3 to 8 kilometres per hour	250 metres	180 metres
9 to 14 kilometres per hour	350 metres	300 metres
15 to 20 kilometres per hour	450 metres	300 metres
FOR GROUND APPLICATION		
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA	
3 to 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 to 8 kilometres per hour	120 metres	100 metres
9 to 14 kilometres per hour	160 metres	120 metres
15 to 20 kilometres per hour	160 metres	120 metres
FOR GROUND APPLICATION		
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA	
3 to 20 kilometres per hour	10 metres	

Diuron use with MEDIUM spray droplet size classification (ASAE S572 definition)		
FOR AERIAL APPLICATION – TERRESTRIAL VEGETATION PROTECTION		
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA	
	FIXED WING AIRCRAFT	HELICOPTER
3 to 8 kilometres per hour	60 metres	60 metres
9 to 14 kilometres per hour	80 metres	60 metres
15 to 20 kilometres per hour	80 metres	60 metres
FOR GROUND APPLICATION		
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA	
3 to 20 kilometres per hour	5 metres	
FOR AERIAL APPLICATION – AQUATIC PROTECTION		
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA	
	FIXED WING AIRCRAFT	HELICOPTER
3 to 8 kilometres per hour	20 metres	20 metres
9 to 14 kilometres per hour	40 metres	40 metres
15 to 20 kilometres per hour	40 metres	40 metres
FOR GROUND APPLICATION		
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA	
3 to 20 kilometres per hour	5 metres	

Diuron use with COARSE spray droplet size classification (ASAE S572 definition)		
FOR AERIAL APPLICATION – TERRESTRIAL VEGETATION PROTECTION		
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA	
	FIXED WING AIRCRAFT	HELICOPTER
3 to 8 kilometres per hour	20 metres	20 metres
9 to 14 kilometres per hour	40 metres	40 metres
15 to 20 kilometres per hour	40 metres	40 metres
FOR GROUND APPLICATION		
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA	
3 to 20 kilometres per hour	5 metres	
FOR AERIAL APPLICATION – AQUATIC PROTECTION		
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA	
	FIXED WING AIRCRAFT	HELICOPTER
3 to 8 kilometres per hour	20 metres	20 metres
9 to 14 kilometres per hour	20 metres	20 metres
15 to 20 kilometres per hour	20 metres	40 metres
FOR GROUND APPLICATION		
WIND SPEED RANGE AT TIME OF APPLICATION	DOWNWIND RISK AREA	
3 to 20 kilometres per hour	5 metres	

CROP/SITUATION	DEFOLIATION CONDITIONS	RATE/HA	CRITICAL COMMENTS
Cotton Defoliation – first or second spray	Ideal Conditions are hot to warm (30 to 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.	150 to 200 mL plus the label rate indicated of D-C-Tron [†] Cotton Spray Oil or Canopy [†] or Hasten [†] Spray Adjuvant	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 maturity may result in yield and quality reductions. • Use the higher rate for denser canopies or to provide a faster response. • A second spray of either ESCALATE Ultra or an alternative harvest aid may be required 7 to 10 days later.
	Good Conditions are warm (25 to 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.	200 to 250 mL plus the label rate indicated of D-C-Tron [†] Cotton Spray Oil or Canopy [†] or Hasten [†] 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.	250 to 300 mL plus the label rate indicated of D-C-Tron [†] Cotton Spray Oil or Canopy [†] or Hasten [†] Spray Adjuvant	Apply as above, but use these rates under average conditions.
	Cold Night temperatures fall below 12°C and/or mean day/night temperatures fall below 18°C.	300 to 400 mL plus the label rate indicated of D-C-Tron [†] Cotton Spray Oil or Canopy [†] or Hasten [†] Spray Adjuvant	Apply as above, but use these rates under cold conditions.

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

WITHHOLDING PERIODS:

COTTON PROCESSING: NOT REQUIRED WHEN USED AS DIRECTED.

GRAZING/COTTON TRASH: DO NOT GRAZE TREATED AREAS OR FEED COTTON TRASH TO LIVESTOCK.

GENERAL INSTRUCTIONS

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

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 Ultra; 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. Tank mixes of ESCALATE Ultra 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 Ultra remain in the sprayer system, it may be released during subsequent applications of other products causing damage to crops.

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 Ultra. If you are growing produce for export, please check with Adama Australia Pty. Ltd. for the latest information on MRLs and import tolerances BEFORE using ESCALATE Ultra.

MIXING

Add the required amount of ESCALATE Ultra straight into the partly filled spray tank or mixing vat with agitator running, followed by D-C-Tron Cotton Spray Oil or Canopy[†] or Hasten[†] 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 Ultra 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 Cotton Spray Oil or Canopy[†] or Hasten[†] 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 to 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 to 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 eg., 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 Ultra per sprayed hectare.

COMPATIBILITY

ESCALATE Ultra is compatible in tank mixtures with ethephon, dimethoate and parathion.

CAUTION: When tank mixed with Wipe-Out 450® (glyphosate), a higher proportion of cotton leaf may be retained (freezing). DO NOT use this mixture on stressed cotton, particularly drought affected cotton.

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 Ultra by air when citrus in flush is within 8 km downwind from the point of application.

- DO NOT apply ESCALATE Ultra by air when within 800 m of lettuce.

In addition:

- DO NOT plant lettuce or carrots in cotton fields where ESCALATE Ultra 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 Ultra has been applied within the previous two months.

- DO NOT plant small grains, sorghum or corn in cotton fields where ESCALATE Ultra has been applied within the previous two 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 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 eyes and skin. Avoid contact with eyes and skin. When opening the container and preparing 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 131126.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for ESCALATE Ultra is available from Adama on request. Call Customer Service on (02) 9431 7800.

CONDITIONS OF SALE: The use of ESCALATE® Ultra Cotton Defoliant being beyond the control of the manufacturer, no warranty expressed or implied is given by Adama Australia Pty. Ltd. 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 Pty. Ltd. accepts no responsibility for any consequence whatsoever resulting from the use of this product.

® Registered trademarks of an ADAMA Agricultural Solutions Ltd Company

† Other registered trademarks

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

Adama Australia Pty. Ltd. ABN 55 050 328 973

Suite 1, Level 4, Building B,
207 Pacific Highway
St Leonards NSW 2065 Australia
Tel: (02) 9431 7800 Fax: (02) 9431 7700

APVMA Approval No: 59120/63160

Batch No.

Date of Manufacture