# TITAN LV Ester 680

# **GENERAL INSTRUCTIONS FOR ALL 2.4-D** PRODUCTS BEARING A SUSPENDED OR **CANCELLED LABEL**

This is a phenoxy herbicide that can cause severe damage to native vegetation and susceptible crops such as cotton, grapes, tomatoes, oilseed crops and ornamentals.

#### INSTRUCTIONS FOR PERSONS WHO POSSESS. HAVE CUSTODY OF OR USE THE CANCELLED OR SUSPENDED PRODUCT

A person who possesses, has custody of or uses a product bearing a cancelled or suspended label referred to in the above Tables 1 and 2 in accordance with the instructions contained in this notice, is taken to have been issued with a permit under section 45B(3) of the Agvet Code to possess, have custody of or use the product bearing the cancelled or suspended label in accordance with those instructions

The instructions in this notice form part of the amended label instructions for a 2,4-D product bearing a cancelled or suspended label.

Use of a 2,4-D product bearing a cancelled or suspended label may only take place in accordance with:

- 1. the instructions appearing on the cancelled or suspended label attached to the product; and
- 2. the general instructions in this notice: and
- 3. the instructions in this notice which correspond to the product's specific aroup.

## POSSESSION OR CUSTODY

A person may possess the product bearing the cancelled or suspended label referred to in the above tables in accordance with its label instructions for 12 months from the Date of Cancellation or Date of Suspension.

#### USE. SUPPLY OR OTHERWISE DEAL WITH

A person may use the product bearing the cancelled or suspended label referred to in Table 1 or 2 according to its label instructions, including any conditions relating to shelf life or expiry date, and the instructions in this notice, for 12 months from the Date of Cancellation or Date of Suspension.

#### INSTRUCTIONS FOR USE

Use of a 2,4-D product bearing a suspended or cancelled label may only take place in accordance with:

- the instructions appearing on the suspended or cancelled label attached to the product: and
- the instructions in this notice.

In the event of any inconsistency between the instructions appearing on the suspended or cancelled label for a product and the instructions in this notice, the instructions in this notice are to prevail to the extent of the inconsistency.

These instructions do not authorise any person to use a 2,4-D product bearing a suspended or cancelled label:

- in any situation; or
- at any time; or
- in any state or territory;

if the person would not be authorised to use the product in that situation, at that time, or in that state or territory under the instructions appearing on the suspended or cancelled label attached to the container for the product.

#### INSTRUCTIONS FOR SUPPLY

A person may supply, or cause to be supplied, at wholesale or retail level the product bearing a cancelled or suspended label referred to in Tables 1 and 2, for 12 months from the Date of Cancellation or Date of Suspension. The supply of the product bearing a cancelled or suspended label may only take place in accordance with the following conditions (new supply instructions):

# FLAT SIZE: 420mm (W) X 224mm (D)

1. For products manufactured prior to 1 October 2020: at the time of supply. the supplier must provide to the person taking possession or custody of the product bearing a suspended or cancelled label a copy of these instructions ٨r

2. For products manufactured on or after 1 October 2020; either a copy of these instructions or the current approved label must be securely affixed to each container of the product.

### WARNING—CONTRAVENTIONS

After the day that is 12 months from the Date of Cancellation or Date of Suspension it will be an offence against the Agvet Code to have possession or custody of the products bearing the cancelled or suspended labels with the intention to supply, or to supply the cancelled or suspended products bearing the cancelled or suspended labels. It is an offence to possess, have custody of, use, or otherwise deal with the products bearing the cancelled or suspended labels listed in Tables 1 and 2 in a manner that contravenes the above instructions.

#### CONSEQUENCES OF FAILING TO COMPLY WITH INSTRUCTIONS

Failing to comply with the instructions in this notice or the instructions detailed in the Gazette amounts to an offence under section 45C(5) of the Aqvet Code and may result in civil penalty proceedings under section 45C(7) of the Agyet Code

### **APVMA CONTACT**

For any enquiries or further information about this matter, please contact: Chemical Review Australian Pesticides and Veterinary Medicines Authority GPO Box 3262 Sydney NSW 2001 Phone: +61 2 6770 2400 Email: chemicalreview@apvma.gov.au

#### DIRECTIONS FOR USE

#### Restraints:

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aguaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone tables below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas

DO NOT allow bystanders to come into contact with the spray cloud. DO NOT apply unless the wind speed is between 3 and 15 kilometres per hour at the application site during the time of application.

DO NOT apply if there are surface temperature inversion conditions present at the application site during the time of application. These conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise

#### Recognising a surface temperature inversion

- A surface temperature inversion is likely to be present if:
- mist, fog, dew or a frost have occurred
- smoke or dust hangs in the air and moves sideways, just above the ground surface
- cumulus clouds that have built up during the day collapse towards evening
- · wind speed is constantly less than 11 km/hr in the evening and overnight
- cool off-slope breezes develop during the evening and overnight
- · distant sounds become clearer and easier to hear
- aromas become more distinct during the evening than during the day.

#### Spray timing

- Spray during the day wherever possible. Vertical mixing of the air makes surface temperature inversions unlikely and will reduce the risk of drift caused by surface temperature inversions.
- There is a very low risk of surface temperature inversion when there is continuous overcast weather, with low and heavy cloud and/or wind speed
- remains above 11km/h for the whole period between sunset and sunrise. • A lack of suitable weather conditions for spraying over extended periods is not an excuse for spraying in unsuitable conditions.

DO NOT apply if crop or weeds are stressed due to dry or excessively moist conditions.

DO NOT apply with spray droplets smaller than VERY COARSE spray droplets according to the ASAE S572.1 definition for standard nozzles. DO NOT use if rain is likely within 6 hours.

#### Monitoring and record keeping

Users of this product MUST make an accurate written record of the details of each spray application within 24 hours following application and KEEP this record for a minimum of 2 years. The spray application details that must be recorded are: 1- date of use with start and finish times of application: 2- the specific location which must include address and paddock/s spraved: 3- product trade name (full name) of the product being used; 4- rate of application which must include the amount of product used per hectare and number of hectares applied to; 5- situation, crop or commodity to which the chemical was applied; 6- wind speed and direction during application; 7- air temperature and relative humidity during application; 8- nozzle brand, model, size, type, and spray system pressure measured during application; 9- height of spay boom from ground ; 10- name and contact details of person applying this product (Additional record keeping and/or details may be required by the state or territory where this product is used).

#### Watch for changes in weather conditions. Stop spraying immediately if a surface temperature inversion occurs or if spraying conditions become unsuitable for any other reason.

#### Advisory for boom sprayer use in cereals, fallow and pasture 1 October to 15 April

Use in cereals, fallow and pastures during the period 3 October to 15 April, it is advised to -

Use nozzles that produce extremely coarse (xc) to ultra coarse (uc) droplets. Use higher water rates per ha, to give better efficacy.

Use slower application speeds to allow operators to lower boom heights. Increasing droplet size and water rates while reducing application speed will assist in mitigating off target inversion drift during summer spraying. Extremely coarse droplets will produce <3% driftable droplets.

#### **BOOM SPRAYERS (GROUND APPLICATION)**

DO NOT apply by a boom sprayer unless the following requirements are met:

- spray droplets not smaller than a VERY COARSE (VC) spray droplet size category (minimum XC between 3 October and 15 April – advisory).
- boom heights 0.5 metres or lower above the target canopy (the higher of either the crop canopy or the targeted weeds)
- minimum distances between the application site and downwind sensitive aquatic and wetland areas including aquacultural ponds, surface streams and rivers (see Aquatic 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for boom spravers') are observed.
- · minimum distances between the application site and downwind sensitive crops, gardens, landscaping vegetation, protected native vegetation or protected animal habitat (see Terrestrial 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for boom sprayers') are observed. The buffer zones provide guidance but may not always be completely protective of all agricultural crops.

#### BUFFER ZONES FOR BOOM SPRAYERS:

Group 19a (680 g 2,4-D/L as EHE):				
Application rate (/ha)	Downwind mandatory no spray zone			
	Aquatic	Terrestrial		
Dryland cropping: winter cereals and fallows				
Up to 230mL (155g ae/ha)	0 metres	0 metres		
Up to 820mL (560g ae/ha)	5 metres	15 metres		
Dryland cropping: preparatory spray and harvest aid application				
Up to 1.7L (1140g ae/ha)	20 metres	30 metres		
Tropical & subtropical uses: sugarcane				
Up to 2.4L (1620g ae/ha)	30 metres	40 metres		
Pasture				
Up to 4.7L (3180g ae/ha)	45 metres	95 metres		
Up to 6.6L (4488g ae/ha)	70 metres	160 metres		
Horticultural, non-orchard uses: potatoes				
Up to 1.1L (780g ae/ha)	10 metres	25 metres		
Up to 2.4L (1620g ae/ha)	30 metres	40 metres		

## DIRECTIONS FOR USE FOR AERIAL APPLICATION To enable aerial application of 2,4-D products the following instructions are provided:

1. Nozzle selection to achieve mandatory VERY COARSE or Larger Droplet Size Categories for aerial application.

#### Important information

spray application

Complying with the requirement to use a specific droplet size category means using the correct nozzle that will deliver that droplet size category under the spray operation conditions being used. Only the following specific methods can be used for choosing the correct nozzle. Use one of the methods specified in these instructions to select a correct nozzle to deliver a VERY COARSE or larger droplet size category for aerial application.

category Nozzle choices must be made using Option 1 or 2 below.

Mandatory Instructions for Fixed-Wing Aerial Applications

Option 2: USE ONLY nozzles rated by the APVMA Approved AAAA Nozzle Calculator or the USDA-ARS Aerial Spray Nozzle Models as VERY COARSE to comply with a product label's requirement for a VERY COARSE spray droplet size category. When using the AAAA Nozzle Calculator or the USDA-ARS Aerial Spray Nozzle Models, aerial applicators must also follow the additional instructions below in (a), (b) and (c), (a) Aerial applicators must only use the droplet size category given in the nozzle calculator at the DV(0.1) position to identify a nozzle to comply with the required

- slower airspeeds provided that the nozzle angle and system pressure are kept the same.

# specific pesticide product with that nozzle.

Instructions for Helicopter Aerial Application – for VERY COARSE droplet size or larger categories Nozzle choices must be made using Option 1 or 2 below.

### Mandatory Instructions for helicopter Aerial Applications

<b>Option 1:</b> For helicopter applications requiring a VEI fixed-wing aircraft in Section 1.

Option 2: When using Accu-Flo nozzles (Bishop Equipment Mfg Inc), USE ONLY nozzles rated according to the manufacturer's instructions to select the correct nozzle to apply a VERY COARSE or an EXTREMELY COARSE droplet size category to satisfy the label requirement for one of those specific droplet size categories.

#### Examples of nozzles and settings that can achieve VERY COARSE or Larger Droplet Size Categories using Section 1, Option 2 include;

	<b>J</b>	
For flying speeds up to 12	0 knots (Fixed wing	j air
Nozzle model	Fan Angle (deg)	De
CP11TT straight stream	-	-
CP09	-	0
For flying speeds up to 10	0 knots (Fixed wing	j air
Nozzle model	Fan Angle (deg)	De
CP09	-	0
CP11TT straight stream	-	
For flying speeds up to 60	knots (Helicopters)	):
Nozzle model	Fan Angle (deg)	De
CP09	-	30
CP03	0	
STANDARD Flat Fan	40	-
STANDARD Flat Fan	40	-
CP11TT FF40	40	
	•	

FOLDS TO: 84mm (W) X 112mm (D)

\_ \_ \_ \_ .

These instructions inform users of 2,4-D products how to lawfully comply with the requirement of a VERY COARSE or larger spray droplet size category for aerial

#### Instructions for Fixed-Wing Aerial Application – for VERY COARSE droplet size or larger categories

Instructions in this section apply to fixed-wing aerial application of products for which a label or a permit Spray Drift Restraint requires VERY COARSE spray droplet

Option 1: For up to a maximum aircraft speed of 120 knots and a VERY COARSE droplet size category, USE ONLY narrow angle flat fan nozzles with spray angle less than or equal to 25, orifice size 20 or greater and oriented straight back to the flight direction. USE ONLY a spray system pressure greater than or equal to 4

spray droplet category. The categories shown at the DV(0.5) and the DV(0.9) positions in the calculator must not be used for making a nozzle selection. (b) Aerial applicators must not apply at airspeeds greater than that speed used to select the nozzle. A nozzle identified as VERY COARSE can also be used at

(c) When a particular pesticide product is chosen within the nozzle calculator as one of the conditions set to select a nozzle, then aerial applicators must use that

#### Note - contact the Aerial Application Association of Australia (aaaa.org.au) for information on how to obtain access to the APVMA Approved AAAA Nozzle Calculator: the USDA-ARS Aerial Sprav Nozzle Models can be downloaded from their website

(ars.usda.gov/plains-area/college-station-tx/southern-plains-agricultural-research-center/aerial-application-technology-research/docs/a-models).

Instructions in this section apply to helicopter application of products where a label or a permit Spray Drift Restraint requires VERY COARSE spray droplet category.

ERY COARSE spray droplet size category. USE ONLY nozzles selected with the methods previously specified for

ircraft):				
eflector	Orifice Size	Orientation to airstream (deg)	Pressure (psi)	Category
	10	0	40 or higher	Very Coarse
	15		50 or higher	
	20		60 or higher	
	0.078	0	70 or higher	
	0.125		90 or higher	

rcraft and Helicopters):

eflector	Orifice Size	Orientation to airstream	Pressure (psi)	Category
	0.078	0	30 or higher	Very Coarse
	0.125		35 or higher	
	10 or larger	0	40 or higher	Extremely Coarse

eflector	Orifice Size	Orientation to airstream	Pressure (psi)	Category
)	0.078	0	30 or higher	Very Coarse
	0.125		30 or higher	Extremely Coarse
	0.062 or larger	0	30	Extremely Coarse
	6 or larger	0	30 or higher	Very Coarse
	10 or larger	0	30 or higher	Extremely Coarse
	6 or larger	0	30 or higher	Very Coarse

#### **AERIAL APPLICATION**

DO NOT apply by aerial application unless the following requirements are met:

- spray droplets not smaller than a VERY COARSE (VC) spray droplet size category
- release heights 5 metres or lower above the target canopy
- minimum distances between the application site and downwind sensitive aquatic and wetland areas including aquacultural ponds, surface streams and rivers (see Aquatic 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for aircraft) are observed.
- minimum distances between the application site and downwind sensitive crops, gardens, landscaping vegetation, protected native vegetation or protected animal habitat (see Terrestrial 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for aircraft) are observed. The buffer zones provide guidance but may not always be completely protective of all agricultural crops.

#### BUFFER ZONES FOR AIRCRAFT: 3 metre release height or lower above the target canopy

Group 19a (680g 2,4-D/L as EHE): 3 metre release height or lower above the target canopy

Application rate (/ha)	Downwind mandatory no spray zone			
	Fixed wing		Helic	opter
	Aquatic	Terrestrial	Aquatic	Terrestrial
Dryland cropping: winter c	ereals and fa	llows		
Up to 0.23L (155g ae/ha)	20 metres	35 metres	25 metres	35 metres
Up to 0.8L (560g ae/ha)	60 metres	90 metres	60 metres	80 metres
Dryland cropping: preparatory spray and harvest aid application				
Up to 1.7L (1140g ae/ha)	100 metres	150 metres	90 metres	140 metres
Tropical & subtropical uses	s: sugarcane			
Up to 1.15L (780g ae/ha)	75 metres	110 metres	70 metres	100 metres
Up to 2.4L (1620g ae/ha)	130 metres	250 metres	120 metres	180 metres

<b>BUFFER ZONES FOR AIRCRAFT:</b>	5 metre release height or lower
above the target canopy	

Group 19a (680g 2,4-D/L as EHE): 5 metre release height or lower above the target canopy

and tanget danop j				
Application rate (/ha)	Downwind mandatory no spray zone			
	Fixed wing		Helic	opter
	Aquatic	Terrestrial	Aquatic	Terrestrial
Dryland cropping: winter	cereals and	fallows		
Up to 0.23L (155g ae/ha)	40 metres	65 metres	50 metres	65 metres
Up to 0.8L (560g ae/ha)	110 metres	160 metres	95 metres	130 metres
Dryland cropping: prepar	atory spray	and harvest	aid applicat	ion
Up to 1.7L (1140g ae/ha)	190 metres	350 metres	150 metres	210 metres
Tropical & subtropical us	es: sugarcar	ne		
Up to 1.15L (780g ae/ha)	140 metres	220 metres	120 metres	160 metres
Up to 2.4L (1620g ae/ha)	300 metres	550 metres	190 metres	300 metres

#### Pasture application by air – 5 metre release height

Application rate 4500g ae/ha, VERY COARSE droplet size, Aerial application (Group 18, 19a, 19b): 5 metre release height or lower above target canopy

Aquatic protection

	Downwind no-spray zone		
Wind speed range at time of application	Fixed Wing	Helicopter	
From 3 to 7 kilometres per hour	750 metres	475 metres	
From 7 to 14 kilometres per hour	Not supported	525 metres	
Terrestrial protection (2.4-D salt formulations)			

Downwind no-enroy zone

	Downwind no-spray zone		
Wind speed range at time of application	Fixed Wing	Helicopter	
From 3 to 7 kilometres per hour	Not supported	750 metres	
From 7 to 14 kilometres per hour	Not supported	Not supported	

Application rate 3180g ae/ha, VERY COARSE droplet size, Aerial application (Group 18, 19a, 19b): 5 metre release height or lower above target canopy

#### Aquatic protection

	Downwind no-spray zor		
Wind speed range at time of application	Fixed Wing	Helicopter	
From 3 to 7 kilometres per hour	575 metres	350 metres	
From 7 to 14 kilometres per hour	650 metres	350 metres	
Terrestrial protection (2,4-D salt formulations)			

	Downwind no-spray zone	
Wind speed range at time of application	Fixed Wing Helicopter	
From 3 to 7 kilometres per hour	Not supported	575 metres
From 7 to 14 kilometres per hour	Not supported	625 metres

# Pasture application – 3 metre release height

Application rate 4500g ae/ha, VERY COARSE droplet size, Aerial application (Group 18, 19a, 19b): 3 metre release height above target canopy

Aquatic protection

	Downwind no-spray zone			
Wind speed range at time of application	Fixed Wing Helicopter			
From 3 to 7 kilometres per hour	475 metres	300 metres		
From 7 to 14 kilometres per hour	475 metres	300 metres		
Terrestrial protection (2.4-D salt formulations)				

	Downwind no-spray zone		
Wind speed range at time of application	Fixed Wing	Helicopter	
From 3 to 7 kilometres per hour	750 metres	475 metres	
From 7 to 14 kilometres per hour	Not supported	525 metres	

Application rate 3180g ae/ha, VERY COARSE droplet size, Aerial application (Group 18, 19a, 19b): 3 metre release height above target canopy

Aquatic protection

	Downwind no-spray zone		
Wind speed range at time of application	Fixed Wing	Helicopter	
From 3 to 7 kilometres per hour	325 metres	190 metres	
From 7 to 14 kilometres per hour	325 metres	210 metres	
Terrestrial protection (2,4-D salt formula	ations)		
	Downwind no-spray zone		
Wind speed range at time of	Fixed Wing	Helicopter	

application	Fixed wing	Helicopter
From 3 to 7 kilometres per hour	575 metres	575 metres
From 7 to 14 kilometres per hour	625 metres	625 metres

#### BUFFER ZONES FORESTRY USES FOR APPLICATION BY HELICOPTER AND ACCU-FLO NOZZLE, 0.020 ORIFICE OR LARGER (product groups 2, 3, 4, 5, 6, 7, 8a, 8b, 9a, 9b, 10, 11, 12, 13, 16, 14a, 14b)

DO NOT apply by fixed wing aircraft DO NOT apply by helicopter unless the following requirements are met:

- Accu-Flo<sup>™</sup> nozzles with orifice size 0.020 or larger are used.
- flying speed 102km/hr (55 knots) or slower
- release heights 15 metres or lower above the target canopy
- minimum distances between the application site and downwind sensitive aquatic and wetland areas including aquacultural ponds, surface streams and rivers (see Aquatic 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for aircraft) are observed.
- minimum distances between the application site and downwind sensitive crops, gardens, landscaping vegetation, protected native vegetation or protected animal habitat (see Terrestrial 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for aircraft) are observed. The buffer zones provide guidance but may not always be completely protective of all agricultural crops.

#### VERTICAL SPRAYERS

DO NOT apply by a vertical sprayer unless the following requirements are met:

- Spray is not directed above the target canopy.

#### Buffer zones for vertical sprayers

Group 15a (22.8g 2,4-D/L as sodiu	m salt)
-----------------------------------	---------

Type of target canopy and dilute water rate	Mandatory buffer zones (distances given in metres)				
	Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas
2 metres tall and shorter, maximum dilute water rate of 1000L/ha	Not required	Not required	Not required	Not required	Not required
Taller than 2 metres (not fully-foliated), maximum dilute water rate of 4000L/ha		15 metres		15 metres	
Taller than 2 metres (fully-foliated), maximum dilute water rate of 4000L/ha	]	10 metres		5 metres	

#### Group 15b (100g 2,4-D/L as sodium salt)

Type of target canopy and dilute water rate	Mandatory buffer zones (distances given in metres)				
	Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas
2 metres tall and shorter, maximum dilute water rate of 1000L/ha	Not required	Not required	Not required	Not required	Not required
Taller than 2 metres (not fully-foliated), maximum dilute water rate of 4000L/ha		15 metres		15 metres	
Taller than 2 metres (fully-foliated), maximum dilute water rate of 4000L/ha		10 metres		5 metres	

# FOLDS TO: 84mm (W) X 112mm (D)

Application rate (/ha)	Wind speed range at time of application	Downwind mandatory no spray zone Helicopter Aquatic Terrestrial			
Release heights 15 m	etres or lower above the t	arget canopy			
Up to 1000g ae/ha	From 7 to 15 kilometres per hour	75 metres	75 metres		
	From 3 to 7 kilometres per hour		35 metres		
Release heights 10 metres or lower above the target canopy					
Up to 1000g ae/ha	From 7 to 15 kilometres per hour	45 metres	45 metres		
	From 3 to 7 kilometres per hour	15 metres	15 metres		

• The outside of the sprayer is turned off when turning at the end of rows and when spraying the outer row on each side of the application site. · For dilute water rates up to the maximum listed for each type of canopy specified, minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for vertical sprayers') are observed.



TITAN AG Pty Ltd ABN 57 122 081 574 15/16 Princes Street, Newport NSW 2106 Tel 02 9999 6655 • Fax 02 9999 0483 www.titanaq.com.au